Helsinki Studies in Education, number 110

Milla Syrjänen

Adults with ADHD and their children – A multiple-case study of attachment

Self-protective strategies of parents with ADHD and their children as mediated by sensitivity

Doctoral dissertation, to be presented for public discussion with the permission of the Faculty of Educational Sciences of the University of Helsinki, in Auditorium 302, Siltavuorenpenger 3A, on Friday April 16th, 2021 at 12 o'clock.

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Abstract

Attention deficit hyperactivity disorder (ADHD) is a common psychiatric condition, characterized by the core symptoms of inattention, hyperactivity and impulsivity. In previous studies, ADHD has been associated with psychosocial difficulties in parenting and attachment relationships. However, little is known about the sensitivity and attachment strategies of adults with ADHD and that of their children. For this reason, the present thesis focuses on these topics.

This thesis consists of three internationally published peer-reviewed articles (Studies I-III). Study I explored the self-protective strategies of adults with ADHD and their histories of dangers and traumas, as presented in retrospect. In Study I, nine adults with the ADHD diagnosis were interviewed using the modified Adult Attachment Interview (the DMM AAI). Studies II and III examined the self-protective strategies of parents with ADHD and the sensitivity they displayed in dyadic interaction with their children. The parents were interviewed with the DMM AAI. Parental sensitivity was assessed using the CARE-Index. Additionally, Study III explored the self-protective strategies of parents with ADHD as well as those of their children as mediated by parental sensitivity. The self-protective strategies of the children were assessed with the Strange Situation Procedure (SSP) or the Preschool Assessment of Attachment (PAA). In Studies II and III, six parents with the ADHD diagnosis and their children, aged between 7 and 36 months, participated. One parent took part with her both children.

In all sub-studies, three subgroups were formed on the basis of risk as indicated by Crittenden's gradient of transformation of information. Study I showed a variety of the self-protective strategies of adults with ADHD in combination with unresolved traumas and losses. In addition, the respondents described in the AAI triangulation in their family of origin, that is, they had been drawn into the schismatic relationship between their parents. However, the adults with ADHD were not able to evaluate and analyze the impact of the triangulated family system on their own development. Instead, they blamed themselves for the intersubjective problems in their childhood families and considered the punishments of their parents as legitimate, caused mainly by themselves. Studies II and III confirmed the results of Study I about the variety and complexity of the self-protective

strategies of parents with the ADHD diagnosis. Results also indicated that unresolved traumas and losses may decrease these parents' sensitivity and impair their ability to engage in mutual regulation of arousal and emotion with their children. The parents' own needs for self-protection impaired their ability to protect their children and decreased the clarity of their communication. The children's self-protective strategies matched those of their parents in regard to the degree of distortion of information as mediated by parental sensitivity. Thus, the results of this thesis could be interpreted in terms of Crittenden's Dynamic-Maturational Model of attachment and adaptation (DMM).

In conclusion, recognizing the variety of self-protective strategies, disorientation at times modifying, and unresolved traumas interrupting the strategic functioning of the individuals with ADHD, can contribute to the tailoring of individualized psychological treatment. DMM-oriented family functional formulations, based on the assessment of the self-protective strategies of each family member would make possible to plan a treatment adapted to the unique family needs, and also to screen early risk.

Keywords: ADHD, attachment, attachment strategy, self-protective strategy, DMM, sensitivity, trauma

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Milla Syrjänen

ADHD diagnoosin saaneet aikuiset ja heidän lapsensa – monitapaustutkimus kiintymyssuhteista
ADHD diagnoosin saaneiden vanhempien ja heidän lastensa itseä suojaavat strategiat sensitiivisyyden välittäminä

Tiivistelmä

Aktiivisuuden ja tarkkaavuuden häiriö (ADHD) on yleinen psykiatrinen häiriö, jonka ydinoireita ovat tarkkaamattomuus, yliaktiivisuus ja impulsiivisuus. Aiemmissa tutkimuksissa ADHD on yhdistetty psykososiaalisiin vaikeuksiin vanhemmuudessa ja kiintymyssuhteissa. ADHD diagnoosin saaneiden aikuisten ja heidän lastensa kiintymyssuhdestrategioista sekä ADHD diagnoosin saaneiden aikuisten sensitiivisyydestä vuorovaikutuksessa lastensa kanssa tiedetään kuitenkin hyvin vähän. Tämä väitöskirja keskittyy näihin teemoihin.

Väitöskirja koostuu kolmesta vertaisarvioidusta, kansainvälisesti julkaistusta artikkelista (osatutkimukset I-III). Osatutkimus I tarkasteli ADHD diagnoosin saaneiden aikuisten itseä suojaavia kiintymyssuhdestrategioita sekä heidän kokemiaan vaaroja ja traumoja. Osatutkimuksen I aineisto koostui yhdeksän aikuisen modifioidusta Adult Attachment Interview- haastattelusta (DMM-AAI). Osatutkimukset II ja III tarkastelivat ADHD diagnoosin saaneiden vanhempien itseä suojaavia strategioita DMM-AAI- haastattelulla ja tutkivat vanhempien sensitiivisyyttä vuorovaikutuksessa lastensa kanssa CARE-Index menetelmällä. Osatutkimuksessa III kartoitettiin lisäksi tutkimukseen osallistuneiden ADHD diagnoosin saaneiden vanhempien lasten itseä suojaavia strategioita Strange Situation Procedure (SSP) ja Preschool Assessment of Attachment (PAA) menetelmillä. Osatutkimuksiin II ja III osallistui kuusi vanhempaa 7-36 kk ikäisten lastensa kanssa. Yksi vanhemmista osallistui tutkimukseen molempien lastensa kanssa.

Jokaisessa osatutkimuksessa tutkittavat erottuivat kolmeksi eriasteisen riskin ryhmäksi Crittendenin kuvaaman tiedonkäsittelyn vääristymisen asteen mukaisesti. Ensimmäinen osatutkimus osoitti, että tutkimukseen osallistuneiden ADHD diagnoosin saaneiden aikuisten itseä suojaavat strategiat ovat hyvin monimuotoisia. AAI-haastatteluissa esiin nousivat myös näiden aikuisten omat käsittelemättömät trauma- ja menetyskokemukset. Lisäksi he kuvasivat lapsuuden perheisiinsä liittynyttä triangulaatiota, kokemuksia siitä, kuinka he olivat lapsina joutuneet osaksi vanhempiensa välistä ristiriitaista suhdetta. Tutkittavat eivät kuitenkaan pystyneet arvioimaan ja analysoimaan sitä, kuinka triangulaatio

heidän perhesysteemissään oli vaikuttanut heidän omaan kehitykseensä. Päinvastoin, he syyttivät itseään lapsuudenperheidensä intersubjektiivisista ongelmista ja pitivät kokemiaan rangaistuksia oikeutettuina ja pääasiassa itse aiheutettuina. Toinen ja kolmas osatutkimus vahvistivat ensimmäisessä osatutkimuksessa havaittua tietoa siitä, että tutkimukseen osallistuneiden ADHD diagnoosin saaneiden vanhempien itseä suojaavat strategiat ovat kompleksisia ja monimuotoisia. Tulokset viittasivat myös siihen, että vanhempien omat käsittelemättömät trauma- ja menetyskokemukset saattavat heikentää näiden vanhempien sensitiivisyyttä sekä vaikuttaa vanhempien kykyyn auttaa lapsiaan viritystason ja tunnetilan säätelyssä. Tutkimukseen osallistuneiden vanhempien tarve suojella itseään heikensi heidän kykyään suojella lastaan ja vähensi heidän viestinnän selkeyttään. Lasten itseä suojaavien strategioiden kompleksisuus oli linjassa vanhempien strategioiden kanssa sensitiivisyyden toimiessa välittäjänä. Näin ollen tämän väitöskirjan tuloksia voidaan tulkita Crittendenin DMM-mallin mukaisesti.

Yhteenvetona todetaan, että ADHD diagnoosin saaneiden henkilöiden itseä suojaavien strategioiden monimuotoisuus sekä disorientaatio strategioita muuntavana ja käsittelemättömät traumakokemukset yksilön strategista toimintaa haittaavina tekijöinä olisi tärkeää huomioida yksilöllisten interventioiden suunnittelussa. DMM-mallin mukainen kaikkien perheenjäsenten itseä suojaavien strategioiden arviointi mahdollistaisi kunkin perheen yksilöllisten tarpeiden ja varhaisten riskien huomioinnin.

Avainsanat: ADHD, kiintymyssuhde, kiintymyssuhdestrategia, itseä suojaava strategia, DMM, sensitiivisyys, trauma

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Preparing this doctoral thesis has been a long process. The published articles and the summary, and the academic degree are naturally the main goals of completing the doctoral thesis. However, to me the meaning of this whole process turned out to be much wider. I would call it my grand journey because it thoroughly and permanently changed my way of thinking. This grand journey gave me a frame of reference to which I am able to mirror both my clinical work and myself in my past and present close relationships.

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Kerava, 21.2.2021

Milla Syrjänen

Contents

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Original articles

This thesis is based on the following three original publications, which are referred to in the text by Roman numerals (Studies I-III).

Study I. Syrjänen, M., Hautamäki, A., Pleshkova, N., & Maliniemi, S. (2018). Adults with ADHD – a retrospective account of the family systems and attachment relationships. *Clinical Neuropsychiatry, 15(2),* 123-31.

Study II. Syrjänen, M., Hautamäki, A., Pleshkova, N., & Maliniemi, S. (2019). Attachment and sensitivity among parents with ADHD – a multiple-case study. *Emotional and Behavioural Difficulties, 24(2),* 156-66.

Study III. Syrjänen, M., Hautamäki, A., Pleshkova, N., & Maliniemi, S. (2019). Self-protective strategies of parents with ADHD and their children as mediated by sensitivity – a multiple-case study. *Journal of Children`s Services, 14(4)*, 278-291.

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Milla Syrjänen asked the study permission from the University Hospital and the Medical Ethical Committee of the University Hospital in question. She contacted the participants after receiving the contact information about the participants from the Clinic for Neuropsychiatry. Milla Syrjänen was the corresponding person for the participants during the whole research process. She conducted all the AAI-interviews and the CARE-Index procedures, which were filmed at the participants` homes. The SSP and the PAA procedures were conducted in the one-way screen laboratory, because these procedures require special laboratory settings and three research team members. Milla Syrjänen acted as one of the three research team members and participated in all the procedures. The data was collected using attachment assessments requiring extensive training. For this reason, the data was coded by three coders (Hautamäki, Maliniemi and Pleshkova) trained by P.M. Crittenden. However, Milla Syrjänen acted as a research team member and participated in all the regular meetings with the other research team members in order to discuss and analyze the coding reports. Milla Syrjänen wrote all three articles in co-operation with Airi Hautamäki. Milla Syrjänen was the first author and the corresponding author in all three articles.

1 Introduction

1.1 Background

Attention deficit hyperactivity disorder (ADHD) is a common psychiatric condition with high comorbidity, the symptoms of which, in even 65 % of the cases, last into adulthood (Faraone, Biederman, & Mick, 2006). In the review of Fayyad et al. (2007), the estimated prevalence of ADHD in adults was 3.4% (range 1.2-7.3%). Despite the dominant genetic explanation models (Gizer, Ficks, & Waldman, 2009), it has been argued that both genetic and environmental risk factors contribute to this familial and multifactorial disorder (Thapar & Cooper, 2016). In addition to the core symptoms of inattention, impulsivity and hyperactivity (see American Psychiatric Association, 2013), ADHD has been associated also with psychosocial difficulties in parenting and attachment relationships. The focus of the previous studies has been in parenting children with ADHD (see Deault, 2010). Some studies have shown difficulties in parenting, if the parent has ADHD (Johnston, Mash, Miller, & Ninowski 2012) or if both the parent and the child have ADHD (Chronis-Tuscano et al., 2008; Ellis & Nigg, 2009; Murray & Johnston, 2006). Early parental sensitivity of adults with ADHD has been examined in only one previous study (Semple, Mash, Ninowski, & Benzies, 2010). In this study maternal ADHD symptoms were associated with troubled maternal caregiving behaviors during infancy.

Furthermore, ADHD has been connected with insecure and disorganized attachment (see Storebø, Rasmunsen, & Simonsen, 2016). These studies have been made mainly in terms of the ABC+D model (for the term, see Spieker & Crittenden, 2018) in which the category D/disorganized focuses on particular infant behaviors as indices of breakdown of the attachment system in moments of heightened stress in the Strange Situation (Main & Solomon, 1990). Only in a few studies attachment strategies has been assessed in adults with ADHD. However, it is important to notice that these studies have utilized only self-report methods (see Storebø et al., 2010). No previous studies have been conducted using the in-depth, standardized and validated interview, the Adult Attachment Interview (AAI) in order to assess attachment strategies of adults with ADHD. Additionally, no previous studies have been conducted in order to assess attachment strategies of children of parents with ADHD. In sum, little is known about sensitivity and attachment strategies of adults and parents with ADHD and that of their children. For this reason, the present thesis focuses on these topics.

1.2 Attachment

Parenting includes the protection and comfort of the immature child (Crittenden, 2016a). Landini, Crittenden and Landi (2016) state that protection refers to keeping the child safe physically and emotionally so that the child can mature in accordance with his inherited potential and is given the possibility to use and develop his physical and psychological resources. According to the authors, comfort means that the child both can use his parents as a secure base from which he safely can explore the world as well as secure haven to return to, when he needs comfort. Exploration includes that the child is assisted in learning to use his own mind to create self-protective meaning from his experience – a condition for that he can achieve genuine independence by adulthood (Landini et al., 2016). Attachment theory describes and analyzes individual differences in these parental functions (Bowlby, 1980; Crittenden, 2016a) and stresses that parenting is based on the parent's dispositional representations of attachment (Crittenden, 2016a) as assessed by the Adult Attachment Interview, AAI (George, Kaplan, & Main, 1985).

According to the DMM approach, attachment is defined in terms of three aspects (Crittenden 2016a, p. 10): "a unique, enduring, and affectively charged relationship with one's mother or partner, a strategy for protecting oneself and one's progeny, particularly, under dangerous conditions, and the pattern of information processing underlying the strategy". In particular the DMM AAI (Crittenden & Landini, 2011), a semi-structured, standardized and validated interview, elaborated from the Adult Attachment Interview (George et al., 1985), can identify parents whose pattern of information processing may put their children at risk through inadequate protection from danger, insufficient comfort and lack of clarity of communication (Landini et al., 2016; Spieker & Crittenden, 2018). According to Spieker and Crittenden (2018, p. 11), "One clinical advantage of the DMM is that its dimensional array of attachment strategies based on information processing sorts children and families reasonably accurately by risk status."

1.3 Sensitivity

Parental sensitivity, defined as a multi-step process which includes the ability to accurately perceive and interpret infant signals as well as promptly and appropriately react to them (Ainsworth, Bell, & Stayton, 1974) is essential during the first three years, when the child is navigating through successive stage-salient tasks related to self-regulation, e.g., from establishing physiological regulation, taking turns, establishing joint attention and forming attachment relationships.

Sensitivity is the precondition for two parental functions, protecting and comforting the immature child (Crittenden, 2016a).

Sensitivity has been the most studied mediating pathway between parental attachment representations and child attachment patterns. Though the variance accounted for by maternal sensitivity has turned out to be modest, Ainsworth's original theoretical proposition linking maternal sensitivity with attachment security has been empirically confirmed (Fearon & Belsky, 2016). In particular, meta-analytic studies of experimental intervention programs designed to increase maternal sensitivity indicate that even short-term programs improving mother's sensitive responsiveness to infant cues are likely to increase the secure attachment of their babies (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2008; Svanberg, Mennet, & Spieker, 2010; van den Boom, 1994). However, in high-risk groups pairing of maternal unresolved and infant disorganized attachment is more frequent (Bailey, Tarabulsy, Moran, Pederson, & Bento, 2017; for the definition of `Unresolved´, see Hesse & Main, 2000; for the definition of `Disorganized´, see Main & Solomon, 1990; see also Granqvist et al., 2017). In the second meta-analysis by Verhage et al. (2016), maternal `Unresolved´ to child `Disorganized´ cross-generational transmission yields a small, albeit significant effect size. This raises the question, if the predominant theory in attachment research has been able to capture the core features of the transmission processes in high-risk contexts (Bailey et al., 2017). The least is known about processes of cross-generational transmission of attachment strategies in high-risk populations, where an insight into these processes is necessary for designing intervention.

1.4 The Dynamic Maturational Model of attachment and adaptation, DMM

The present thesis was conducted using The Dynamic Maturational Model of attachment and adaptation (DMM), a clinical expansion of Mary Ainsworth's original work (Ainsworth et al., 1974; Ainsworth, Blehar, Waters, & Wall, 1978) that focuses on adaptation to danger (Crittenden, 2016a). The DMM was used, because it is better attuned to the issues of parental adequacy (Spieker & Crittenden, 2018). Crittenden (1981, 1985, 1988) elaborated the DMM patterns in clinical work with maltreating families and on the bases of three samples studied in Ainsworth's University of Virginia laboratory. However, rather than taking a symptom-based view, the DMM aims at understanding attachment in terms of protection against danger (Crittenden, 2016a). Following Ainsworth (Ainsworth et al., 1978) the DMM makes use of detailed case examinations, and emphasizes narratives and the interpersonal functions of behaviors instead of ratings of infant behavior. The array of DMM self-protective strategies are grouped as Types A, B

and C, originally identified by Ainsworth (Ainsworth et al., 1978), with many sub-strategies, as described by the DMM (Crittenden, 2016a; see Figure 1).

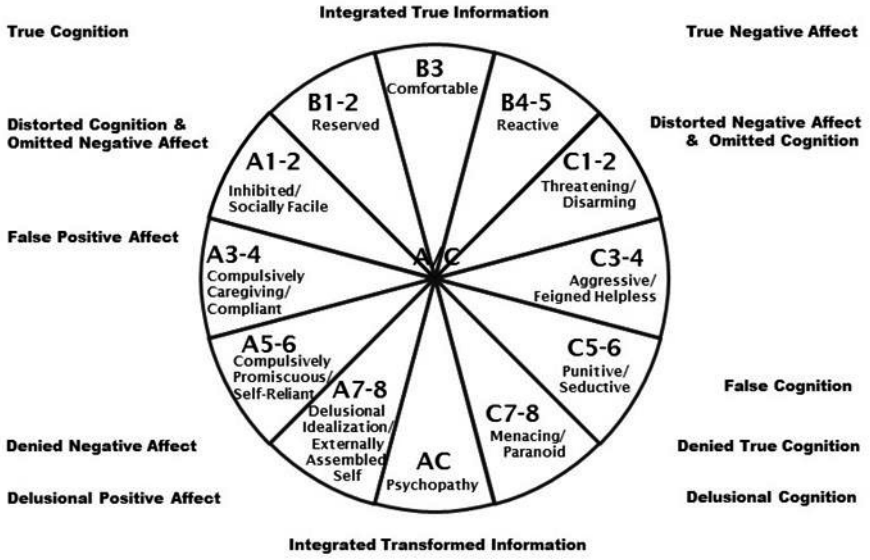

Figure 1. DMM Self-Protective Strategies (© P.M. Crittenden, used with permission)

Crittenden and Landini (2011) state that the stress of the DMM is on processing of information about attachment relationships and it is organized around two behavioral dimensions, cognition and affect. They suggest that children learn to rely on cognition, that is, sequential information of contingencies leading to safety or danger, if their displays of negative emotion (fear of abandonment, desire for comfort or anger) are consistently rejected. The children learn to inhibit displays of emotion in order to prevent the stress-related feelings connected to the expected rejection by their parents. According to Crittenden and Landini (2011), the threats connected to the development of Type A1-2 are low. The children are protected from real danger, but not comforted sufficiently, that is discouraged from protracted displays of emotion (Crittenden & Landini, 2011).

Besides the Type A in the normative range (A1-2), there are six compulsive strategies (A3-8), also termed as A+ (Crittenden & Landini, 2011). These strategies of endangered children are considered compulsive, because children not only inhibit behaviors rejected by their parents, but shape their behavior to fit the demands of their parents, and, later, other people in general (Crittenden, 2016a). Type A3 refers to compulsive caregiving, or role reversal, connected to false

positive affect, found among neglected children, whose parents, when depressed, may retreat from their children's needs of caregiving and comfort (Bowlby, 1980; Crittenden & Landini, 2011). Type A4 refers to a mechanic, robotic compliance with even unreasonable adult demands found among physically abused children. They try to avoid the threat of abuse from dangerous attachment figures (Crittenden & DiLalla, 1988). If Type A3-4 strategies fail, the children may in adolescence develop Type A5 socially and/or sexually promiscuous behavior to make social contact and comfort possible, but without risking intimacy, or retreat from intimate relationships by developing a self-reliant (A6) strategy (Bowlby, 1980; Farnfield, Hautamäki, Nørbech, & Sahhar, 2010). Crittenden (2016a) suggest that children, highly endangered by their parents, may develop the Type A7 strategy, delusional idealization of a dangerous attachment figure that actually harmed them in their childhood, in order to fix an intolerable reality. The author notes that likewise, the externally assembled self (A8) is connected to pervasive neglect, in particular, abandonment and frequent separations from attachment figures, from early childhood into adolescence and adulthood. According to Crittenden (2016a), the individual is not able to feel an identity with himself and ultimately resorts to assembling an identity by relying on external sources such as diagnoses of health care professionals and official records. As a person using an A strategy appears bound by un-changing if-then contingencies, he over-attributes responsibility to himself for bad things that happen(ed) to him (Crittenden, 2016a).

Children, who use Type C strategies, have had unpredictable parents (Crittenden, 2016a). They have learnt that sequential information of contingencies promising safety or danger cannot be trusted. Affective information is given precedence over cognitive information (Farnfield et al., 2010). Crittenden (2016a) state that as the attachment figures tend to pay attention to what is seen as negative behavior from their perspective and, thereby, to reinforce overtly forbidden behavior, the preschool children learn to coerce their parents by using an affective logic, alternating between split and exaggerated affects, that is, displays of threatening anger versus vulnerability and helplessness. The function is to maximize the attention of the attachment figures and render them predictable (Crittenden, 2016a). The family is often enmeshed, and the children may be used as pawns in the parents' relationship struggles (Farnfield, 2014). Like Type A1-2 strategy, the Type C1-2 strategy is normative for some cultures and is not usually associated with risks for the long-term psychosocial development of the child (Crittenden, 2016a).

Besides the Type C strategies in the normative range (C1-2) there are six obsessive strategies (C3-8) also termed as C+ (Crittenden & Landini, 2011). The child learns to maximize parental attention by flexibly alternating between the two packages of display of negative affect (Crittenden, 2016a). If the parents are even more unpredictable, the preschool-aged child needs to work hard to get parental

attention. According to Crittenden and Landini (2011), the child has to exaggerate even more one affective state, Type C3 (hot-blooded anger) or C4 (feigned helpless), at the expense of the other. During the school years, some children organize a cooler use of their affect, by deceiving others in regard to their intentions (false cognition) (Crittenden, 2016a). Crittenden and Landini (2011) suggest that children either aim at punitive revenge (C5) or, by presenting themselves as victims, seduce others to rescue them (C6). As persons using a C strategy do not trust if-then contingencies, they have difficulties in discerning their own contribution to social outcomes (Crittenden, 2016a). The most extreme Type C strategies, developing in adulthood, become states of free floating dread, in which everybody may seem dangerous, resulting in menace (C7) and/or paranoia (C8) (Crittenden, 2016a; Crittenden & Landini, 2011; Farnfield et al., 2010).

The DMM also includes the combinations of A and C patterns, alternating A/C or blended AC (Crittenden & Landini, 2011).

In the present thesis, following Landini et al. (2016), the classic Ainsworth strategies (Ainsworth et al., 1978) in the normative range (A1-2, C1-2) were considered low risk. The higher A+ and C+ strategies elaborated by the DMM ranged from moderate risk (A3-6, C3-6) to high risk (A7-8, C7-8). The risk was defined in terms of the gradient of transformation of attachment-relevant information (Crittenden, 2016a). In regard to parenting, strategies numbered `3-4´ indicate that parents at times may transform information in a way that confuses their own needs with those of their child, `5-6´ indicates transformations that parents at times act self-protectively rather than child-protectively, and `7-8´ indicate distortions of information ranging to delusionally construing the child as a threat to the parent (Landini et al., 2016; see also Crittenden, 2016a, for the gradient of transformation of information). Instead of offering adequate protection and comfort and instead of helping the child to make meaning of his experiences, the distressed parent may feel urged to act self-protectively (Crittenden, 2016a).

1.5 The DMM formulation of ADHD

The presence of the symptoms of inattention, hyperactivity and impulsivity suffices to diagnose ADHD (American Psychiatric Association, 2013). The interpersonal meaning and the psychological function of the symptoms in family interaction are rarely taken into account (Landini, 2014). However, the DMM approach has emphasized the idea of the function of behavior and the adaptive value of self-protective strategies (Crittenden, 2016a). Crittenden, Dallos, Landini, & Kozlowska (2014) stress the functional significance of ADHD symptoms of a child in family interaction. They state that the ADHD symptoms can be conceptualized as an adaptation to a triangulated family system and

connected to a variety of self-protective strategies and the modifier `disorientation, DO´.

Through case-studies Crittenden and Kulbotten (2007), Dallos and Smart (2011) and Crittenden et al. (2014) have viewed ADHD symptoms in a (family) relational framework. In the first DMM study of ADHD, Crittenden and Kulbotten (2007) analyzed the connections between the self-protective strategies of a mother and her son, who had received the ADHD diagnosis and connected disorientation in the AAI discourse to a non-strategic high arousal state, because of problems in source memory (Schacter, 1996). Crittenden and Landini (2011) state that when the precise source of the memory is omitted from the dispositional representations there is an over-attribution of representations (from different times and perspectives), an uncertainty in regard to the nature of the danger (when and where it will happen), and, in particular, its relevance to the self. Every bit of information becomes self-relevant and therefore, it is difficult to evaluate the accuracy and validity of a memory or remembrance, given current circumstances (Crittenden & Landini, 2011). The authors note that as every dispositional representation appears self-relevant and must be acted upon the person is characterized by a continuous diffuse hyper-arousal, at the same time not knowing the reason for this. The child may become disoriented, when parents are responding to their own traumas that are only partially related to the child (Crittenden & Landini, 2011).

The concept `triangulation´ links attachment theory with family systemic thinking. Dallos and Vetere (2012) state that the process of triangulation in a discordant spousal relationship encompasses invitations of troubled parents to the child to both comfort them and take sides. The authors explain that child is drawn into a triangulated family system, when parents unintentionally impose their perspectives, definitions of the family situation or the behavior of a family member on the child. Parents may try to protect the child from problems in their spousal relationship or even engage their child in the protection of their marital relationship. The child may imagine that he has a direct relationship to his parent, even though it is mediated by the desires originating from the relationship between the parents (Dallos & Vetere, 2012). According to Crittenden (2016a, p. 178), the child may become confused about his own causal contributions to the relationships, because "...the threat is not tied to, nor visible to the children, but is acted out with the children as if they had caused the parents' behavior." The child cannot follow his parents' true intentions, accurately understand self-relevant causation and discern his contribution to the outcome (Crittenden, 2016a).

How can a child respond to parents' troubled relationship, too threatening to attend to, but also too crucial for the child to be ignored? According to Crittenden et al. (2014), the child adapts to the highly stressful situation that he is not able to change by coping with a Type A+ strategy when the family problems are inescapable, predictable and potentially irresolvable. Crittenden et al. (2014)

suggest that the child may try to avoid the conflict by retreating from it, staying away from home and disconnecting emotionally, whereby self-reliant Type A+ strategies may evolve. According to the authors, another strategy is trying to intervene, e.g., to take the go-between role and try to keep the peace, whereby Type A+ compulsive caregiving and compliant strategies may evolve. The child may also deflect family problems by turning attention to his own high arousal and self-regulation problems, i.e., struggling with his parents and getting into trouble, which may reward the child for the exaggeration of negative affect ultimately resulting in a Type C+ strategy (Crittenden et al., 2014).

Dallos and Smart (2011) studied ADHD symptoms in a case study about intervention into a family system in which the boy, who had received the ADHD diagnosis, was highly confused in regard to the social reality constructed in his family. He felt caught in a triangulated position between his parents wanting to be close to both parents and, at the same time, fearing to say `wrong´ things. Dallos and Smart (2011) stress that the boy's triangulated position contributed to his disorientation: he avoided to commit to an opinion regarding his parents' relationships. Because the boy was only partially aware of his role in the family system, he could not causally connect his anger and frustration to his inescapable position in the triangulated family system. He tried to cope with a Type A+ strategy at times broken by the intruding strong affect. Whenever he became aroused, confused or angry, he displayed bits and pieces of a Type C+ strategy (Dallos & Smart, 2011).

In sum, the child's ADHD symptoms may serve different functions. In particular, the ADHD symptoms may serve a self-protective function in a family, where he feels unprotected, but cannot organize around a specific danger (Crittenden & Kulbotten, 2007).

2 The current study

2.1 The aims of the study

This thesis consists of three internationally published peer-reviewed articles (Studies I-III). The list of original articles is presented in the beginning of this thesis.

Study I explored the self-protective strategies of adults with ADHD and the history of dangers, traumas and losses, as presented in retrospect in the DMM AAI.

Study II examined the self-protective strategies of parents with ADHD using the DMM AAI, and the sensitivity they displayed in dyadic interaction with their children as assessed by the CARE-Index.

Study III explored the self-protective strategies of parents with ADHD using the DMM AAI as well as those of their children as assessed by the SSP and the PAA, as mediated by parental sensitivity as assessed by the CARE-Index.

2.2 The multiple-case study

Because of the lack of previous research in this area, the multiple-case study design was fit for the exploratory purpose of this thesis. Case-study research has played an important role in developing new ideas in clinical practice (Dallos & Smart, 2010; Robson, 1993). One aim of the multiple-case study is to analyze data by using explanation building technique that is, to formulate general explanations that fit the singular or multiple cases, based on commonality and differences, across manifestations (Yin, 2003). The focus is to understand the meaning of the circumstances within cases although an exploratory case study cannot generate causal relations (Eisenhardt, 1989). According to Lincoln and Guba (1985, p. 110), "The only generalization is: There is no generalization". They criticize the idea that generalization, in the sense of discovery of laws, is the aim of science. Lincoln and Guba (1985, p. 122) argue that the question is not a choice between searching for general laws and studying the unique, because between these extremes there is "the broad range of the related". For this reason, their assumption is that research findings will always be only "working hypothesis" (for the concept, see Cronbach, 1975, p. 125) and in case study research these working hypotheses can be used in order to understand other cases. However, also in case study research theoretical connections between the findings and extant theories

and studies can be drawn in accordance with the coherence theory of truth (see e.g., Engel, 2002).

The purpose of the present thesis was descriptive, not hypothesis-testing (Glaser & Strauss, 1967). The process of data analysis was inductive and tightly linked to the data. At the beginning of the present thesis, the research team members were not able to predict what would be found. For this reason, in contrast to theory-driven model of the research process, this thesis gave priority to the data and the field under study over preliminary theoretical assumptions (see Circular model of the research process, Flick, 2009). However, the DMM framework was utilized for the analysis and synthesis of data (Farnfield et al., 2010).

2.3 Participants

For Study I, nine respondents (females=5; males=4; mean age 29.7 years; range 22.7-37.3) were recruited from a University Hospital, Department of Psychiatry, Clinic for Neuropsychiatry in two separate phases (in May 2010 and in between January 2013 and November 2015). The clients of this clinic, who fulfilled the inclusion and exclusion criteria, were invited to participate in the study during these time periods. Eight respondents met the criteria for the ADHD combined subtype and one for the predominantly inattentive subtype (see American Psychiatric Association, 2000). In Study I, the respondents were identified as R1-R9. With the exception of one respondent, all had the ongoing ADHD-medication at the time of the study. All of the respondents had completed secondary school and three had finished some kind of education after that. Six respondents had children of their own.

For Studies II and III, six parents (five mothers, one father, mean age = 32 years; range = 23.0–39.3) and their children, aged between 7 and 36 months, were recruited from a University Hospital, Department of Psychiatry, Clinic for Neuropsychiatry. The clients of this clinic, who fulfilled the inclusion and exclusion criteria, were invited to participate in the study between January 2013 and November 2015. In Studies II and III, the parents were identified as P1-P6 and the children with pseudonyms. P3 participated with her both children. Thus, the data included seven parent-child dyads. All six parents met the criteria for the ADHD combined subtype (see American Psychiatric Association, 2000). With the exception of one parent all had the ongoing ADHD-medication at the time of the study and had received outpatient therapeutic counselling. All parents had completed secondary school and three had finished some kind of education after that. All parents lived with their children. With the exception of one mother, all parents cohabited or were married with their partners at the time of the study.

In all three sub-studies, exact selection criteria were used to form a uniform sample. The goal was to ensure that the sample would exemplify the disorder that was to be studied and that the conclusions would not be inflected by other

comorbid disorders. For the inclusion in Studies I-III, the adult participants: (1) age range was 22-45 years; (2) had received the ADHD diagnosis from a University Central Hospital, Department of Psychiatry, Clinic for Neuropsychiatry; (3) were no longer living at home with family of origin; (4) spoke Finnish as the first language; (5) had received at least six Apgar points at the time of birth in order to exclude severe learning difficulties. In addition, for the inclusion in Studies II and III, the adult participants had a 0-36 month old child, who was able to participate in the study as well. For the exclusion in Studies I-III, the adult participants: (1) had a comorbid DSM-IV diagnosis and ongoing regular use of psychotropic medicines, except for the ADHD-medication; (2) had participated in any form of psychotherapy.

The ADHD diagnosis had been assigned to each adult participant by psychiatrists at a University Central Hospital after the diagnostic assessment based on multiple sources of information, e.g., The Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) (First, Spitzer, Gibbon, & Williams, 1996), The Structured Clinical Interview for DSM-IV Personality Disorders (SCID-II) (First, Gibbon, Spitzer, Williams, & Benjamin, 1997) and Conners' Adult ADHD Diagnostic Interview for DSM-IV (CAADID) (Epstein, Johnson, & Conners, 2001). Also relatives were interviewed and clinical records dating back to the each participant's birth were collected from public and private health services. Though the adult participants had received the ADHD diagnosis as adults, it was verified during the diagnostic process that they had shown ADHD symptoms already as children.

2.4 Ethical considerations

The study was approved by the Medical Ethical Committee of the University Hospital in question. The participants gave written informed consent after receiving verbal and written information about the respective study. Participation in the study was voluntary. The participants had their freedom to withdraw at any time. To protect the participants' anonymity, all names used are pseudonyms or abbreviations, and all identifiable information has been changed. Post-interview feedback was available for each participant. Some of the parents were eager to discuss and reflect on the results on the bases of the video clips of the Strange Situation Procedure, the Preschool Assessments of Attachment, and the CARE-Index.

3 Study I

This chapter is based on the first original article, termed as Study I (Syrjänen, Hautamäki, Pleshkova, & Maliniemi, 2018).

3.1 Assessment

3.1.1 The DMM AAI

Each respondent was interviewed using the DMM AAI (Crittenden & Landini, 2011) which is a semi structured, standardized and validated interview, elaborated from the Adult Attachment Interview, AAI (George et al., 1985; Hesse, 2008). The interviews were audiotaped and transcribed verbatim. The DMM AAI includes questions regarding experiences in early close relationships, provision of protection and comfort, traumas and losses. The focus is on the dangers in the history of the respondent, in particular, in terms of the degree of coherence of the discourse around incidences that may have endangered the respondent and his development. Coherence of discourse, according to Grice's (1975) conversational maxims, is considered a crucial indicator of the coherence of mind (Hesse, 2008; Crittenden & Landini, 2011). In the integrative questions, the respondent is asked to assess the consequences and the meaning of his experiences for his development as a person, which gives information on his reflective functioning (Farnfield et al., 2010).

An accumulated body of literature supports the reliability and validity of the DMM expansion of the AAI (Farnfield et al., 2010). The DMM AAI is particularly suited to differentiate among endangered individuals, who have developed more extreme self-protective strategies outside the normative ABC range (Crittenden & Landini, 2011). The DMM model subtly elaborates the D category used in infancy (Disorganization in the Strange Situation, see Main & Solomon, 1990; Duschinsky & Solomon, 2017) and its equivalent `Unresolved´ on the AAI in adulthood (Hesse, 2008). Bakermans-Kranenburg and van IJzendoorn (2009, p. 250) note that the unresolved classification "… may be less than optimally discriminating between clinical phenotypes."

The DMM AAI also has markers for modifiers that indicate the failure of the self-protective strategies; the markers of a particular attachment strategy are present, but the speaker cannot use the strategy to protect himself (Crittenden & Landini, 2011). Crittenden and Landini (2011) identify depression (Dp: refers to a sad awareness of self as object and that the strategy is not working) and intrusion of forbidden negative affect (ina: refers to a sudden and uncontrollable rush of the forbidden affect). The authors state that regarding the modifier of disorientation

(DO), in the AAI discourse the speaker shows high arousal and presents incompatible versions of past and present sliding from one perspective to the next without being aware of it. They further explain that the speaker is not able to explore and resolve discrepancies between her own and conflicting parental representations and to choose the representations that would serve her own interests. Reorganization (R) is a modifier that reflects an emergent and ongoing process of change from one strategy to another (Crittenden & Landini, 2011). According to Crittenden (2014), the modifier of partial reorganization is defined by that the speaker: (1) is able to think about her childhood experience and her parents' state of mind during her childhood in productive ways; (2) is able to draw the self-protective conclusion to herself and her children, and does not put herself in a position of non-agency in regard to self-protection; (3) is not depressed, but maybe sad about what has happened and that she is not able to impact the relationships to and between her parents and (4) likes to do better than her parents, attempts at reversal parenting. This is expressed by that the speaker shows: (1) cooperation with the interviewer; (2) openness in addressing problems; (3) the evidence of non-B strategies, but the AAI is not defensively strategic; (4) a desire for change: stated clearly on the semantic level, not yet sufficiently substantiated for the coder to accept, but not that idealistic or borrowed that the coder rejects it: (5) credible evidence for the semantic words; (6) the appropriate displays of feeling (no transformations) and (7) some information on the process of integration (Crittenden, 2014).

Main and Goldwyn (1984-1994) only identify evidence of preoccupying lack of resolution of trauma or loss. The DMM AAI identifies also other forms of psychological responses to unresolved trauma or loss which are important to recognize in a traumatized sample (Crittenden & Landini, 2011). According to Crittenden and Landini (2011), a trauma is probable, if the child is not able to protect himself with his attachment strategy. In the AAI, the coder must decide whether the speaker is resolved in regard to a specific dangerous episode. The authors state that markers of a trauma in the discourse are that a trauma momentarily interrupts the coherent narrative (that is, incoherent speech around danger in the AAI discourse) indicating a break in the strategic self-protective functioning. They explain that when either too much or too little information in regard to specific dangerous events is retained, the speaker is not able to differentiate the aspects of a dangerous situation in the past from those that are relevant in the present or future, which temporarily interrupts the strategic self-protective functioning. Incoherent discourse indicates that the speaker is not yet resolved regarding a specific dangerous episode, and may defensively dismiss, displace, deny or block the danger (Crittenden & Landini, 2011).

3.1.2 Data analysis

The AAI transcripts were coded and assigned to a classification on the basis of its overall fit to the attachment categories elaborated by the DMM modification (Crittenden & Landini, 2011) of the Main and Goldwyn (1984-1994) coding method. In addition, traumas and losses as well as modifiers were coded. The transcripts were coded by two coders (Airi Hautamäki and Sinikka Maliniemi), trained by P.M. Crittenden, of which one had research-level reliability.

Each transcript and the coding report were read several times to become familiar with each case. Next, the cross-case patterns (Eisenhardt, 1989) were searched with the help of the analysis of the discourse and the content of the history that was presented in the transcripts. Starting from the first transcript, attention was drawn to (1) the unresolved traumas, connected to several dangers, in particular, emotional neglect, emotional and physical abuse, and witnessed domestic discord, and (2) the highly incoherent discourse in the first three transcripts (the speaker sliding from one perspective to the next, as if different histories were told), which made it difficult for the coders to construct the history and psychological profile of the speaker (see markers of disorientation, Crittenden & Landini, 2011). Gradually, a consistent theme emerged. The fourth transcript was the first one in which the speaker was able to portray the triangulated family system into which he had been drawn, in which his parents invited him to collude against the other parent. After that, bits and pieces of a triangulated family pattern (Dallos & Vetere, 2012) could be discerned in the transcripts. Through the familiarization with the data, working hypotheses were shaped and they formed the emergent frame that was compared with the extant literature and again, with the evidence from each case. In terms of Eisenhardt (1989), the central idea was the constant comparison of theory and data. The working hypotheses were: (1) Dangers, including unresolved losses or traumas in regard to neglect, abuse and witnessed marital discord including triangulation in the speaker's family of origin are part of the history of dangers presented in the AAI discourse; (2) Though the descriptive diagnosis (ADHD) is the same for the respondents, there is a variation of complex self-protective strategies, because the adaptive functional significance of the ADHD symptoms in family interaction varies; (3) A long-term developmental cost for this adaptation may be disorientation. Markers of disorientation would be found in the discourse reflecting the failure of self-protective strategies (Crittenden & Kulbotten, 2007; Crittenden & Landini, 2011). After reading nine transcripts, a level of saturation was attained in regard to the hypotheses formulated.

3.2 Findings

3.2.1 Traumas in regard to abuse, domestic discord and violence

For the respondents, emotional abuse, often connected to physical abuse was a typical trauma, an integral part of the affectively heated, escalating and deteriorating cycles of family interaction and so poignant that the respondents were still preoccupied by it. R1 told about the easily aroused, spiraling negative affect in the adverse cycles of family interaction coupled to the heightened risk of physical abuse. She also told about the violent fights between her and her brother, which, according to her, may have modeled those of their abusive parents. When asked about how she thought her childhood experiences had affected her adult personality, she showed some self-awareness in regard to her problem of reacting with anger. She was still preoccupied by the physical abuse:

> "We-ell (pause 1s) well hmm (pause 2s) I don`t know, I, in a way, myself may, kind of really, or I mean, lose my temper in a way, really sort of not easily, but if I get angry, then I may, in a way, or somehow, I sort of totally lose my self-control, and then, but then again, I don`t know, has it, in a way, been influenced by that my parents have been like that, or in a way, or am I just what as I am, or in a way, how is it in a way actually, and then."

She paused, was very dysfluent regarding the negative affect and questioned herself; she did not know and did not trust her mind. She could not sort out her own perspective, why she felt that she was prone to react impulsively with anger and was not able to draw self-protective conclusions.

Although R7 was able to describe early emotional neglect by his hardworking parents, he dismissed some of its impact on his development. His deep-seated feelings of worthlessness were also connected to emotional abuse by his father, who in their heated and escalated fights had shouted that R7 was "good for nothing". According to McGee, Wolfe and Wilson (1997), emotional abuse is a risk factor for internalizing problems, because it negatively impacts the development of the child's self-system regulating his self-esteem. If the child has to experience intense negative affect by parents that cannot be displayed, the child's capacity to self-regulate may be compromised, increasing the risk for internalizing difficulties (McGee et al., 1997). The lack of parental warmth (Nicholas & Bieber, 1996) connected to the derogation of the child, makes the child feel that his parents are not available as secure bases for emotional scaffolding and social support (Cecil, Viding, Fearon, Glaser, & McCrory, 2017).

The respondents reported that they had witnessed quarrels between their parents, even escalating to domestic violence. They either tried to minimize or

dismiss the parental fighting, or were preoccupied by the domestic violence. R4 was on his way to resolve his trauma and asserted that something good had come out of it, that is, he was not going to treat his spouse as his father treated his mother, and his children would not witness similar scenes of domestic violence. R9, after her first child was born, ended all communication with her father, because she did not any longer want to be drawn into the triangulation of her family in origin. She had decided that her children would never witness the alcohol abuse and even life-threatening domestic violence that she had experienced. She was capable of drawing self-protective conclusions for herself and for her children. She told, in a dysfluent way, lacking memory at some points, questioning herself, also in present tense, the following episode to illustrate that her relationship to her father had been frightening:

> "Um-m, I don`t remember, how it has sort of started. I remember there was such a closet in the end of that hallway, and then there was a telephone (inhales). And then, when mother always called the cops, so then mother, father said that (swallows) um-m that (pause 2s) was it mother, probably (she) was sort of heading at that closet to call up, so that it (father) wouldn´t hear that it (mother) is calling (inhales) and then there probably have been such (an old-fashioned telephone) at that time, which need the turning of the crank so (pause 2s) so well and have certainly been then so (inhales) then father came there and then I don`t know, if it (father) has hit there. Then it (father) has kind of said that `now you will call those cops, or I will beat you. And then, if you call, then I will beat you up´, so there was no sort of (pause 2s) in a way, in principle that`s all I remember (inhales). And then father, I don`t, I don't remember, I don`t know, if I have, or probably I have seen, because I have been the one who always has been (a go-) between them in a way, so that I have seen those, probably all those incidents pretty well. Mm, but I don`t sort of remember it (talks slowly trying to access memories) (pause 2s) as it happened sort of very well, nothing else than that (pause 2s) hallway. And I don`t even remember what happened after that. Probably (pause 2s) father has left from there and then the cops have arrived and taken it (father). I don't know (inaudible word), that time, that mother's (inaudible word) sort of eye is kind of bruised up and then it (mother) told the doctor that it (mother) fell on ice and then the doctor said that falling in that way wouldn't result in such an injury, but in a way nobody (pause 2s), but it is perhaps, probably in a way such a thing."

She was still preoccupied by her frightening experiences concluding vaguely that nobody intervened and tried to normalize that. Her transcript did not meet the criteria of the depression (Dp) in the DMM AAI (Crittenden & Landini, 2011),

but she was sad about that she had not been able to impact the destructive relationship of her parents, and that she had to take a distance from them.

3.2.2 Traumas in regard to emotional neglect

Early emotional neglect and later supervision neglect could be discerned in all transcripts. The emotional neglect was dismissed, sometimes displaced to a younger sibling, even denied. In some transcripts, it could only be derived indirectly, e.g., the child having thoughts about running away from home, building a phantasy home in the woods; listening to the ever-changing sounds of the city life from her open window, in order to self-soothe; peeing in one's pants as a 4-year-old child in the night and not daring to call her mother or go to the restroom alone. R6 told about familial Christmas celebrations, when she was asked to tell what happened when she was ill as a child:

> "… But that I remember that I was sick one Christmas and I certainly remember that (laugh) I was lying (laugh) there on the floor of our long hallway and I looked at the living room. There was the Christmas tree and in a way the presents. I have such a memory that probably it only sort of (groans) that probably I have in no way been left there on the floor, but I have been that exhausted that I haven`t had the strength to enjoy those presents, instead I have gone to lie down there, that somehow I have felt as if I was lonely sort of that I am alone there (inhales) on the hallway floor, that our Christmases were always extremely sort of wonderful, and nobody ever drank or anything like that, but somehow i-, that it is almost the only thing that I remember that I would have been sick."

She remembered only one time being ill, lying abandoned in the hallway, when she was needy. She took responsibility for not being able to take part and dismissed feeling lonely. The episode ended in an extreme positive wrap up of the wonderful Christmas celebrations (nobody drank, although her father had a chronic drinking problem) dismissing the emotional neglect.

The supervision neglect was expressed in some transcripts (R2, R4 and R7) by the narratives of mothers not reacting to their children's early experimentation with tobacco and alcohol. R2 told how he nearly drowned (which he took the responsibility for), when he was six years old and went swimming alone. He told how he took care of himself and his brother as they were school-aged children, because their divorced single parent mother worked and travelled much.

3.2.3 Triangulation

Most of the family relationships were triangulated. All respondents monitored their speech, expressed by pauses, indicating cautiousness in regard to what could be said. R1 told in a contradictory way how she felt, when her parents were fighting:

> "(pause 1s) Hmm, actually one was really afraid somehow, I don`t know why (sneers) or in that way, because it was not sort of related to me, or perhaps then I sort of was afraid that if I say something, then they will get angry at me, too, or something sort of like that."

The speaker said that she was frightened, but distanced herself. She did not know why, because she claimed that it was not connected to her. She went on and changed her perspective ending with a vague statement minimizing the parental anger. Apparently, she had been exposed to conflicting parental responses and to take sides in conflicts between her parents. However, she was not aware of the situation and could not causally connect her anger and fear to the contradictory expectations connected to being stuck into the family triangle.

Four respondents (R4, R6, R7 and R9) were able to verbalize how they had been drawn into their parents' conflicts. In particular, the partially reorganizing respondents (R4, R7 and R9) told how they, as children, were invited to collude with one parent against the other. R7 described how his mother derogated his father in the aftermaths of a jealousy attack of his father:

> "… It (he) was sort of most jealous of that that mother was an (occupation removed) and it (mother) travelled a lot, so then it (father) kind of made it (her) feel guilty that it (mother) had some work trips and then sort of blamed it (her) that it (she) surely had another man or that, and something like that that (inaudible word) some really stupid things in the presence of children, retrospectively thought, but (pause 4s) so (they) have been angry also at each other. And then moth.., mother, however, did not shout ever in those situation, but then it (she), however, may have sort of, not slandered, but in a way talks a bit then sort of when father is not present, so then it (mother) says again, that it (father) is such an idiot and blaa, blaa, blaa in that way, that…"

He was open about the problem and verbally articulated the perspectives of his father accusing his mother, and his mother devaluing his father, and concluded that, in retrospect, it was stupid to act like this, when the children were listening. He ended with `that´ and left the self-relevant conclusion about the affective impact of his role on himself open. Integrative thinking was partly forestalled in regard to his own feelings.

R9 described how her father's strong derogation of her mother had impacted her perception of her mother:

> "Mm that I remember that I considered father as, kind of a real, such a hero in that way that (inhales) it (father) was just kind of a really great guy (inhales). And perhaps my, my and my mother`s perhaps in a way slightly such (pause 2s) more icy, not icy relationships, but in that way that we are not so close, may also be a result of that father despised mother really much (inhales) and talked about it (mother) or talked really disrespectfully and really rudely, so that, although I don`t think like that, but I feel that it certainly also has affected this, because then sort of reciprocally (inhales), but well."

However, the respondents were not yet able to fully articulate the impact of being exposed to conflicting parental responses. They were only partially able to causally connect their own frustration and anger with their roles, imposed on them, in the family triangle.

3.2.4 Self-blame: the internal causal attribution of oppositional behavior

Self-blame (Dallos, Denman, Stedmon, & Smart, 2012; Martel et al., 2011) was the clearest semantic conclusion for the respondents. They recalled predominantly negative experiences for which they blamed themselves. R8 remembered that her mother was always angry, shouting at her being "a walking disaster." R3 offered her immutable intrinsic character as an explanation to how her childhood experiences had impacted her personality. She spoke dysfluently, accompanied by false positive affect:

> "(pause 2s) Well, I really can`t say anything to that (talks slowly) umm-m (pause 6s) in fact I have actually always kind of, I have thought sort of that (pause 1s) that the intrinsic character of a human being is that that (pause 1s) strong that (pause 1s) that (pause 1s) or well sort of that (pause 3s) um-m (pause 2s) what a human being is now, so that can`t that can`t in my opinion in a way, can at best be used as a bad excuse for that that (stutters) someone is what one is, because of this and that, but or well, I don`t know, or (laugh) I would say that (pause 3s) um-m well, yes of course now (pause 2s) (stutters) some things can in a way affect something (pause 2s) or I mean in sort of that, I think I am I am (stutters) um-m, I have somehow such (pause 1s) such (pause 1s) um-m, how can it be said, um-m (stutters) a strong (pause 1s) intrinsic character that in a way, nothing won´t have an impact on it that I would be like this anyway

> in spite of whatever would have happened (laugh) and nothing can be done about that (laugh)."

The respondents considered the punishments as legitimate, caused by themselves, because, in retrospect, they described themselves as challenging children. R1 explained her parent`s physical punishments by portraying herself negatively, taking all the responsibility and ending in an inconclusive metacognition, that is, she really did not know:

> "Well, probably they have been that angry that then I only sort of, I don`t know, just acted as (I) have acted, that they haven`t sort of really thought of what they are doing (sneers) or then I have been a really irritating brat or something (sneers). I don`t know."

The ADHD diagnosis had ultimately confirmed that something, from the beginning, had been wrong with them and they considered their behavior as an internal, immutable trait. Because they had been stubborn children, they were responsible for the intersubjective problems in their family systems. This could be considered a depression marker in the DMM AAI. The ADHD diagnosis may even enhance deterministic thinking, `I am suffering from genetically determined disorder; there is no other cure than medication´. If social failures accumulate, learned helplessness, even depression may result.

3.2.5 Subgroups

The AAI transcripts were classified into three subgroups on the basis of the risk connected to the gradient of transformation of information related to the attachment classifications (Crittenden & Landini 2011, Crittenden, 2016a). Following Landini et al. (2016), the classic Ainsworth strategies (Ainsworth et al., 1978) in the normative range (A1-2, B1-5, C1-2) were considered low risk. The strategies elaborated by the DMM ranged from moderate risk (A3-6, C3-6) to high risk (A7-8, C7-8).

The low risk group

This group consisted of two males, R4 and R7, and one female transcript, R9, classified as IO(R) (Insecure Other, partial reorganization) (Crittenden, 2014). IO means Insecure Other (dysfluencies of speech and distortions of thought do not fully fit the DMM attachment patterns and the discourse shows some features of reorganization, see Crittenden & Landini, 2011). The transcripts allowed the coders to construct a psychologically plausible picture of a harsh childhood. Yet, although the respondents were able to verbally articulate the dangers in their families of origin and their own negative affect elicited by their role in the family

triangle, they were not yet fully able to discern the affective impact of the dangers and the triangulated relationships on themselves. R4 and R7 acknowledged the triangulation, but because they still idealized their mother, they were not able to recognize the emotional neglect they had experienced and they still displayed some mixed feelings toward their father. R9 was sad about having to withdraw from her parents' self-destructive relationship in order to protect her children and herself. Her greatest fear was that she would repeat her parents' tragic relationship not being able to protect her children. Expressing self-efficacy, she thought she had been able to create a more balanced family than her own family of origin was:

> "… But., I don't know, I have always had so- sort of such a joy of life and (inhales) a need sort of to live and progress forwards (pause 1s), yet sort of not to leave those issues unprocessed, but such that I haven`t in a way got stuck (pause 1s) in those sort of (inhales) deep muds, and (pause 2s) well."

However, the partial reorganization did not include all the traumas. R9 was still partly caught up in past childhood traumas, in particular, the domestic violence connected to parental alcohol abuse. The unresolved traumas among the partially reorganized respondents might still affect them and their understanding of their own safety and that of their children.

The moderate risk group

This group consisted of one female respondent, R8, and two male respondents, R2 and R5.

R8 was classified as A3C3,4 (a blended combination of compulsive and obsessive strategies), interrupted by a loss and traumas. These unresolved traumas, i.e., the early loss of her father and later sexual harassment and physical abuse by her stepfather, pervaded her functioning all through the discourse and derailed her C+ strategy at these points. She was still preoccupied by childhood traumas and losses, though she also tried to dismiss them.

R2 and R5 utilized a compulsive Type A6 strategy, interrupted by traumas, and for R2 modified by an affective intrusion. Although they had been confronted with threats in their childhood families, in particular, emotional neglect and marital discord, the uniting feature was that they dismissed the impact of any sort of danger on themselves. R2, who had met the criteria for the ADHD predominantly inattentive subtype, sat still all through the interview avoiding affectively rousing topics by monitoring his discourse, being dysfluent regarding the negative affect by cutting off them and by becoming very vague. The only time he did not succeed was in the context of probing his plans for suicide. For a short moment, angry affect intruded, he came alive and he presented a cruel suicide phantasy in terms

of the unconnected images of chopping (his) head and limbs off using a guillotine like machine.

The high risk group

This group consisted of three female respondents. R1 and R3 were classified as DO A+C+ (a blended combination of A+ and C+ strategies modified by disorientation). Due to the rapid variations in the discourse, no specific sub patterns could be designated. There was evidence of bits and pieces of A+ and C+ patterns thrown into the discourse, but these were used non-strategically, i.e., did not help the respondent to dismiss the negative affect in order to wind down or to involve the interviewer. R6 was classified as DO A3,4,7C3 (a blended combination of A+ and C+ strategies modified by disorientation).

The AAI discourse indicated that the respondents lived in a vague and fluid intersubjective reality, difficult for them to decipher and interpret in terms of self-relevance (Crittenden et al., 2014). They were diffusely hyper-aroused, but could not decide what to attend to, so they tried to attend to everything. The transcripts were incoherent with lack of the connection between different parts of the interview. The respondents slid from one perspective to the next without being aware of it themselves. They were not able to sort out, in a self-relevant way, their own perspective, neither in childhood nor adulthood. They could not remember episodes substantiating the idealizing semantic words of their parents and blamed themselves for misfortunes. Yet, they tried to explain why unfortunate things had happened and concluded that they did not know for sure. Though a broad range of information appeared to be available for the respondents, it was difficult for them to integrate information to yield new understanding and more adaptive behavior in terms of self-protection. Their integrative analyses in the AAI represented a combination of `analytic´ (looking at themselves from the outside with the eyes of a professional, taking the perspective of the interviewer) and `psychobabble´ resulting in inconclusive metacognitions, i.e., self-questioning attempts at reflective thought that did not lead to self-relevant or – protective conclusions (Crittenden & Landini, 2011). Indications of their blurred inter-subjective reality were the use of vague expressions, e.g., `sort of´, `kind of´, `in a way´. Procedurally, the confusion of the respondents was the most evident, when they requested reorientation from the interviewer, questioned or tried to reorient themselves through self-talk. They confused the interviewer, who had to work hard to stay on track and to make sense of what was said. The coders had difficulties in constructing a psychological profile binding together the past and the present in a psychologically plausible way, because the transcript consisted of different versions of their history.

These respondents had been confronted with dangers in their family of origin, but they appeared unaware of it. Although they described domestic discordance

including triangulation, they were not aware of or could not verbally articulate their roles in regulating their parents' relationship. Domestic violence and physical abuse were expressed indirectly in accounts of, e.g., playing in a risk-taking way a game of being sent to the gallows and being nearly killed by hanging as well as sadistic nightmares. R1 feared her uncontrollable anger and that she would be at risk hurting her presumptive own children like her parents hurt her and her siblings. She sadly doubted whether she, for this reason, could have any children of her own.

R6 showed some capacity to verbally articulate her role in regulating her parents' spousal relationship. However, she acted out her high arousal and anxiety through an excessive flow of words. She was able to talk, on the semantic level, about the sources of danger, but could not get in touch with and actually feel her negative affect in regard to the threats even denying negative parental intentions. Because of her strong denial of negative affect, she could not take a clear affective stance in regard to her attachment figures and draw self-relevant conclusions of how to protect herself against excessive parental demands still put on her.

3.3 Conclusions

In Study I, the AAI transcripts of nine adults with ADHD were analyzed. Although the respondents had received the same diagnosis, a variety of self-protective strategies was found, some of which were modified by disorientation. All transcripts contained dangers that had resulted in unresolved traumas. However, the respondents differed in their awareness of the unavoidable and imminent dangers as expressed by their capacity to verbally articulate them, by using internal mental state language (Beeghly & Cicchetti, 1994), in a self-relevant way. Fonagy, Luyten and Allison (2015) term this mentalization, i.e., an individual's capacity to understand himself and others as intentional beings in terms of mental states, acquired in the context of attachment relationships. Although the disoriented respondents described fragments of domestic discordance and violence including triangulation, they were not able to articulate the impact of being exposed to conflicting parental responses, drawn into take sides in conflicts between their parents and not being noticed and seen as the unique children they were. They seemed to have learnt that anything they say from the perspective of one parent may be undermined by the other, and that they would not get any support in articulating their own stance based on their own feelings. Because the causal conditions affecting them were hidden, they made erroneous self-attributions of causality, acted on this erroneous information and felt confused, even disoriented, as Crittenden (2016a) has proposed. Except for the partially reorganizing respondents, they could not affectively take a stance and draw self-protective conclusions.

Findings support the hypothesis of Crittenden et al. (2014) that the characteristics of ADHD could be conceptualized as adaptation to a triangulated family system and connected to a variety of organized self-protective strategies. One adaptive short-term function of the ADHD symptoms may be to avoid attending to threatening, but inescapable parental problems (Crittenden et al., 2014). In family systems terms, easily distracted behavior and short attention spans may allow the child to procedurally monitor problems in his parents' relationship, without becoming fully of aware of the information, e.g., what is the nature of the danger I am responding to, and when and where does it recur? (Crittenden, 2015). Distracting behavior may, in turn, redirect the parents' attention from their own problems to their child, thus defusing the problems of the parents (Crittenden et al., 2014). However, in a retrospective study we can only pose questions requiring further investigation, for example: Had the adaptation to triangulated family situations hindered some of the respondents from fully accessing source memory? Would a long-term developmental consequence of this adaptation be disorientation? Could problems in accessing source memory also be conceptualized as a collateral damage of triangulated family systems, in which the child may imagine that he has a direct relationship to his parent, although it is mediated by the desires originating from the relationship between his parents?

4 Studies II and III

This chapter is based on the second original article, termed as Study II (Syrjänen, Hautamäki, Pleshkova, & Maliniemi, 2019a) and the third original article, termed as Study III (Syrjänen, Hautamäki, Pleshkova, & Maliniemi, 2019b).

4.1 Assessments

4.1.1 The DMM AAI

The parents were interviewed using the DMM AAI (Crittenden & Landini, 2011), which is a semi-structured, standardized and validated interview, elaborated from the Adult Attachment Interview (George et al., 1985). The interviews were audiotaped and transcribed verbatim. The transcripts were coded by two coders (Airi Hautamäki and Sinikka Maliniemi), trained by P.M. Crittenden, of which one had research-level reliability. For further information regarding the DMM AAI, see page 24.

4.1.2 The CARE-Index

The sensitivity of the parents was assessed using the CARE-Index (Crittenden, 2005, 2010; see also Künster et al., 2010), which is a low-stress observational assessment procedure for categorizing parental and child patterns of interaction based on 3–-5 minutes of videotaped semi-structured play interactions. The infant method (Crittenden, 2010) can be used with children from birth to 15 months and the toddler method (Crittenden, 2005), including a frustration task, with children aged between 16 and 72 months. The focus is on relationships, not individuals, i.e. the parents' and children's interactive behaviors are assessed as dyadic, each in the context of the other (Crittenden, 2010; Hautamäki, 2014). The assessment is less based on frequency counts of specific behaviors than on categorical judgements of the function of behaviors in the interactive flow. The adult codes aim to assess adult sensitivity to child`s signals under low stress conditions through three aspects: sensitivity, control, and unresponsiveness. The Infant and Toddler CARE-Index, provide a 14-point Dyadic Synchrony Scale, where values of 11–14 are classified as 'sensitive' and 7–10 as 'adequate' (adequate range). Adequate sensitivity is defined as 'adequate play that is characterized by noticeable periods of dys-synchrony (either controlling or unresponsive)' (Crittenden, 2010, 21). Values of 5–6 are classified as 'inept' (intervention range), defined as 'Clear, unresolved problems; limited playfulness, but no evidence of

hostility or lack of empathy' (Crittenden, 2010, 21). Values of 0–4 represent 'at risk' (high-risk range). The range of 3–4 is defined as 'Clear lack of empathy, nevertheless, some feeble (insufficient or unsuccessful) attempt is made to respond to infant; lack of playful quality' and the range of 0–2 as 'Total failure to perceive or attempt to sooth the infant's distressed state; no play' (Crittenden, 2010, 21). The videotapes were coded by two coders (Airi Hautamäki and Natalia Pleshkova), trained by P.M. Crittenden. One of the coders had research-level reliability in the Infant CARE-Index and the Toddler CARE-Index, and was blind to the cases. P.M. Crittenden classified four of the interactions.

4.1.3 The Strange Situation Procedure (SSP)

The self-protective strategies of children between 11 and 15 months were assessed using the Strange Situation Procedure (SSP), which is a structured laboratory separation–reunion procedure consisting of eight 3-minutes episodes (Crittenden, 2016b). The aim is to assess the three main strategies that the infant uses to maintain the protective availability of the attachment figure, when stress rises (Ainsworth et al., 1978). The attachment classification (A, Avoidant; B, Secure; C, Ambivalent-resistant) was coded using the Ainsworth criteria (Ainsworth et al., 1978), and criteria for identifying the DMM expansions (preA3-4, preC3-4 and the combination of these) were applied according to Crittenden (2016b). The SSP was coded by two coders (Airi Hautamäki and Natalia Pleshkova), trained by P.M. Crittenden, who both had research-level reliability, one of which was blind to the cases.

4.1.4 The Preschool Assessment of Attachment (PAA)

The self-protective strategies of children over 15 months were assessed using the Preschool Assessment of Attachment (PAA), which is a validated method of coding strange situations with preschool children (Crittenden, Claussen, & Kozlowska, 2007). It is a modification of the Ainsworth infant classificatory procedure adapted to fit the more complex psychological and interpersonal functioning of preoperational children (Farnfield et al., 2010). The PAA identifies Type A1-2 and A3-4 strategies, B1-5 strategies, C1-2 and C3-4 strategies and the combination of these (Crittenden et al., 2007). It also includes the modifiers of depression and intrusion of forbidden negative affect (Farnfield et al., 2010). The PAA was coded by two coders (Airi Hautamäki and Natalia Pleshkova) according to Crittenden (2004). One of the coders had research-level reliability and was blind to the cases. One dyad was also classified by P.M. Crittenden.

4.1.5 Data analysis

First, the transcribed AAIs were coded. In terms of Crittenden (2016a), the focus was on the dangers in the familial relationships, the self-protective strategies which the parents had developed to cope with the dangers in their families of origin and the effectiveness of the strategies. Not only the self-protective strategies, but also the unresolved traumas and losses of the parents were hypothesized to be discerned in their interaction with their child impacting their capacity to comfort their distressed infants (Schechter, 2017; Shah, Fonagy, Allen, & Strathearn, 2014). As the analysis proceeded, it became clear that also intra-psychic dangers had to be considered, that is, internal(ized) conflicts that the dismissal of fear, desire for comfort or anger secondarily may generate (Busch, 2005). These may originate from particular restrictions and distortions in the parent-child affective dialogue, e.g., the parent does not respond empathically to or may even punish bids for comfort (see Lyons-Ruth, 1999). Also these defensive intrapsychic conflicts should be viewed as interactive and adaptive in origin. In information processing terms, the child learns to omit certain types of cognitive or affective information (Bowlby, 1980; Crittenden, 2016a).

Second, the CARE-Index, SSP and PAA were coded. After the coding of all the assessments and becoming familiar with each dyad, cross-case patterns (Eisenhardt, 1989) were sought with the help of the analysis of the discourse and the history that was presented in the AAI transcripts of the parents. Cross-case patterns were also sought in regard to the connections between the self-protective strategies of the parent and the child, looking at parental sensitivity as a mediator.

The case-ordered meta-matrix (Robson, 1993) which consisted of low, moderate and high-risk subgroups was formed in terms of the developmental risk that the transformations of information by the parent, as indicated by the DMM AAI discourse, created for their children (see Landini et al., 2016).

4.2 Findings

4.2.1 The low-risk group

Two parents, P2 and P4, displayed emergent reorganization in regard to attachment, IO(R) (insecure other, partial reorganization) and an adequate sensitivity with their children. IO means Insecure Other, that is, the dysfluencies of speech and distortions of thought do not fully fit the DMM attachment patterns (Crittenden & Landini, 2011). Their children`s self-protective strategies were in the normative range (see Table 1). Still, the parents displayed indications of unresolved traumas that momentarily could interrupt their psychological functioning. Although they could articulate being drawn into triangulated family situations and wanted to reverse their family constellation with their own children,

they were not yet able fully to evaluate the impact of the family discord and triangulation in their childhood families on their own development. However, they were able to keep the protection of their own children in their mind.

Table 1. The sample characteristics (the low-risk group)

Parent Gender	AAI Classification	Child Gender	CARE-Index Age (child) Sensitivity	PAA Age (child) Classification
P2 M	IO(R) Utr(dpl)EN Utr(p)EA Utr(p)PC	Nils M	36 months sensitivity: 7	36 months C1-2
P4 F	IO(R) Utr(p)DV	Annina F	31 months sensitivity: 7	31 months C2

Note. IO(R)=Insecure other, partial reorganization; Utr(dpl)EN=displaced trauma of emotional neglect; Utr(p)EA=preoccupied trauma of emotional abuse; Utr(p)PC=preoccupied trauma of parental conflicts; Utr(p)DV=preoccupied trauma of domestic violence; C1-2=threatening-disarming; C2=disarming.

P2 and his son Nils

Although P2 was able to describe early emotional neglect by his hard-working parents, he displaced the trauma to his siblings. He still partly idealized his mother, but he had started to repair his struggling relationship with his father. He realistically described how he, as a child and adolescent, had been drawn into the schismatic spousal relationship and the triangulated family situation. He stated that he currently had good relationships to his parents, who both regretted that they worked so much, when their children were young. Reparation appeared to have started in P2's newly established dialogue with his parents. However, in order to work, this dialogue should also touch on how the early emotional neglect negatively impacted his feelings of worthlessness and lack of self-esteem. Sad feelings lurking beneath the presentation of the currently socially successful façade were still connected to dismissed early emotional neglect. Although P2 was able to describe both early emotional neglect and emotional abuse, he was not yet fully aware of its impact on his development. His feelings of worthlessness were also connected to earlier emotional abuse by his father, who had told him as he was younger that he was 'good for nothing'. According to Cecil et al. (2017), emotional abuse is associated with negative mental health outcomes, because it indexes issues that are common to all forms of maltreatment. By demeaning the

child, parents may instill in the child a belief that he is un-loved and worthless (Cecil et al., 2017). P2's greatest fear was to be excluded, to be rejected and un-loved, if failing parental expectations. For this reason, P2 felt very grateful for being included in his family of origin again, acknowledged and accepted by his father. He appeared disposed to perform, currently studying to become a highly trained professional.

In Toddler CARE-Index, P2 showed adequate sensitivity. He was playing in a relaxed way smiling disarmingly to Nils, trying to soften the frustration and negotiate with his son. P2 adapted nicely to Nils, also in the role of a playmate. In the PAA, Nils displayed both coy and resistant behaviors. When P2 left the room, Nils did not look after him, as if dismissing him, until the door had closed. Only after that he looked at the door. Nils was anxious, but did not show it to his father. When Nils was alone, time seemed to stop and Nils repeated a sweeping mechanic movement with a toy in his hand. He did not display relaxed or happy facial expressions, but frowned at his father at the reunions in contrast to his father's disarming positive affect. Nils did not show proximity-seeking in the reunions. Instead he sought closeness already in the pre-separation episodes. Nils engaged both his father and the Stranger to support his play.

P4 and her daughter Annina

P4, Annina's mother had idealized her childhood father, and currently had conflicted feelings regarding him. P4 was still preoccupied by and sad about the domestic violence perpetrated by her father on her mother and the triangulated family situation into which she was drawn. She often returned to the theme in the AAI and expressed a strong wish to reverse it with her own children. P4 had had a caregiving and a go-between role regarding her mother. However, she was able to articulate realistically her complex position in the triangulated family system. In the wake of father's harsh physical abuse of her mother, she had gradually de-idealized her father and distanced herself from him. She had learnt to understand that her mother was very stressed when she was a child. This insight had resulted in a more nuanced picture of her relationships to her parents – connected to sadness, because she accepted that she could not any longer help them by going-between – they still were too self-destructive and destructive to each other. Genuine sadness appeared in the AAI about the events that had happened and still happened in her family of origin and that could not be changed. Currently, she is affectively working through her cognitive, semantically stated insights. This is accompanied by sad feelings, because she realizes that she cannot change her parents' destructive relationship with each other. P4 is, however, able to draw the self-relevant and self-protective conclusions. She stated that she had made it; she had succeeded in creating a safe family life with her husband for her own children. She was proud that she had been able to combat her greatest fear – to repeat the

marital tragedy of her parents, the discordant and triangulated family system accompanied by severe domestic violence and abuse.

In the Toddler CARE-Index, P4 looked sad displaying a low-key communication (sitting relatively motionless with a rather still face). Mostly she left the initiation of activities to her daughter and Annina liked to be in control. However, because P4 was able to think about and symbolize her abusive childhood experiences and get in touch with the fear, helplessness and anger elicited by her adverse childhood experiences, she was able to perceive and keep her daughter's needs in her mind and display sufficient psychological availability to Annina (Berthelot et al., 2015). When introducing the frustration task, P4's face was vibrant. She displayed her psychological availability by following up and responding to Annina's initiations and responses. Likewise, in the PAA, P4 displayed a low-key communication. Still, because P4 was able affectively to connect to her own feelings, she was able to keep her daughter's needs in her mind being gently psychologically available.

4.2.2 The moderate-risk group

Two mothers, P3 and P5, had self-protective strategies in the moderate risk range, interrupted by unresolved traumas and losses. P3 displayed sensitivity in a risk range and P5 on the border to inept. However, their children had been able to develop self-protective strategies in the moderate risk range, in order to cope with and channel their anxiety related to maternal rejection and lack of comfort (see Table 2).

Table 2. The sample characteristics (the moderate-risk group)

Parent Gender	AAI Classification	Child Gender	CARE-Index Age (child) Sensitivity	SSP/PAA Age (child) Classification
P3 F	C5-6Δ Ul(p,dpl)F Utr(p)SA by SF Utr(p,ds)PA by SF, BF	Robin M	7 months 28 months sensitivity: 4	 28 months A3-4-(pA6)
P3 F	C5-6Δ Ul(p,dpl)F Utr(p)SA by SF Utr(p,ds)PA by SF, BF	Manuela F		14 months R(pA+→C)
P5 F	C5-6Δ Utr(p)EA,PA Utr(p,dpl)CSA by a relative	Augusta F	13 months sensitivity: 5	13 months pA3,4-

Note. C5-6Δ=Punitive-seductive, triangulated strategy; Ul(p,dpl)F=preoccupied and displaced loss of father; Utr(p)SA by SF=preoccupied trauma of sexual abuse by step-father; Utr(p,ds)PA by SF, BF= preoccupied and dismissed trauma of physical abuse by step-father and boyfriend; Utr(p)EA,PA=preoccupied trauma of emotional and physical abuse; Utr(p,dpl)CSA by a relative= preoccupied and displaced trauma of childhood sexual abuse by a relative; A3,4-(pA6)=compulsive caregiving and compulsive performance and partial pre-self-reliance; R(pA+→C)=reorganization from pre-compulsive caregiving toward C; pA3,4-=pre-compulsive caregiving and pre-compulsive performance.

P3 and her son Robin

P3 was interviewed with the AAI and video filmed for the Infant CARE-Index with her son, Robin, when he was 7 months old, and for the Toddler CARE-Index and the PAA, when Robin was 28 months old. P3 used a triangulated punitive-seductive strategy (C5-6), interrupted by unresolved traumas and early losses. She had a few reminiscences, and only related to her father, before the age of six years, the age at which her father died.

The interaction of P3 with her son was in the risk range of the Infant CARE-Index. P3 imitated play by mechanically offering toys without highlighting them

or taking any notice of what Robin was interested in. This intruded on what Robin was doing, and he did not attend much to the toys presented by his mother. P3 did not display an interest in Robin's intentional world. One time she teased with a toy, calling Robin to turn to and crawl to her, accompanied by false positive affect: 'Come on!' When Robin approached her knees, and touched her long hair, she withdrew and Robin quickly turned away as if expecting her rejection. P3 was very uncomfortable with Robin's physical proximity-seeking, which may also reflect her preoccupied trauma in regard to the sexual harassment by her step-father in adolescence as told in the AAI. As Suardi, Rothenberg, Rusconi Serpa and Schechter (2017) suggest, the trauma-related stimuli including the child's distressed state may trigger high arousal in the traumatized mother, who momentarily had to protect (or defend) herself against the threatening arousal by turning away from the physical touch of her son. She had to protect herself, that is, her own struggle for self-regulation temporarily competed with her resources for sensitive caregiving. Thus, her sensitivity to the signals of her child momentarily decreased as well as her ability to engage in mutual regulation of arousal and emotion with her son (Suardi, Rothenberg, Rusconi Serpa, & Schechter, 2017).

P3 preferred an independent infant, and Robin was learning that proximity-seeking would cause rejection. The coders predicted that Robin's developmental pathway could evolve up to a compulsively self-reliant strategy (A6). He had to separate early, i.e., learn the psychological boundaries with his mother, even though his mother did not sufficiently support his individuation (Mahler, Pine, & Bergman, 1975). Because of P3's needs of self-protection, she was not able to mobilize an interest in Robin`s intentional world or mirror positively his unique characteristics. Robin risked to fall out of his mother`s mind most of the time, and he had to work hard to get her attention. Thus, P3 was not affectively engaged in the Infant CARE-Index, showing some control in offering toys not at all connected to what Robin was doing at the moment.

In the Toddler CARE-Index her sensitivity level was the same. Robin was in charge of the play that also involved buying and selling. When confronted with the frustration, Robin did not display any negative affect. Instead, he showed social flexibility starting to exchange goods in order to get back what he wanted.

In the PAA, Robin seemed to be a competent little boy, also when left alone. He looked older than his age and displayed both compulsive caregiving (A3) and performance (A4-) as well as evolving compulsive self-reliance (pA6). Robin established a play of cooking and serving food and he took care of his mother and fed her, thus, reversing their roles. Robin also took the responsibility for keeping up the play. The superficial first impression was positive, but it was the child, who did the work. P3 treated Robin as a caregiver, smiled at him and was proud of his competence. Under the surface of self-reliance, Robin's anxiety level appeared high. When he felt frustrated by his mother, he displaced his anger on the Pooh

Bear doll beating it and throwing it away, as if saying: I don't want you, Pooh Bear! In addition, P3`s handling of Robin's body, when undressing him, had a harsh and irritated quality. However, Robin had been able to adapt to the consistent rejection by developing a Type A+ strategy that worked with his mother. He had been able to get the attention of his mother with his self-protective strategy.

P3 and her daughter Manuela

P3 also took part in the SSP with her 14 months old daughter Manuela. Already in the pre-separation Episode 2 in the SSP, Manuela appeared aroused. She explored and moved restlessly on the floor, regularly slipping down, but without complaining. Manuela channeled her arousal in restless walking around. Also the mother's arousal was high. She had a stern face, the foot and fingers were twisting, but her face and voice were softer than with Robin. In the pre-separation episodes, Manuela went to the door, as if seeking a safer context and P3 had to call her back a few times. Manuela wanted to leave the room even though her mother was in the room and showed it to her mother. Thus, she was not afraid of her mother. When the Stranger entered, Manuela smiled at her and initiated contact with her. Manuela uttered squeaky vocalizations and displayed false positive affect. When together with the Stranger, Manuela walked two times to explore the rubbish bin, even though she had been forbidden to do that. She did not use her mother or the Stranger to calm herself down and defend herself against her strong anxiety. Manuela displayed signs of compulsive inhibition (stiff body, stumbling without crying, not seeking comfort, open mouth, but no sounds or only squeezed sounds) and an evolving compulsive caregiving strategy (pA3). She also displayed bits of Type C behavior (trying to leave the room and explore the dust bin, though she had been forbidden by her mother and the Stranger), but these behaviors were not accompanied by any provocative looks or vocalizations. The coders agreed on an ongoing reorganization from evolving compulsive A strategy toward C.

P3 showed some interest in how Manuela felt. Though, feeling distressed P3 confused herself with her daughter. On both reunions in the SSP, she asked her daughter: "Where have you been?" as if Manuela was the person, who had left the room. Was Manuela a container of her mother's projective identifications in an enmeshed relationship? Or did P3 momentarily become confused about who was who, as she tried to self-regulate in the wake of the revival of traumatic losses at expense of being able to engage in mutual regulation of arousal (Schechter, 2017)? An indication of Manuela's traumatically skewed inter-subjectivity with her mother was her relatively high level of arousal. According to Schechter (2017), the infant's anxiety and anger may become dysregulated, which may further trigger the mother's anxiety and avoidance creating a vicious cycle that may

contribute to the intergenerational transmission of trauma. If so, also Manuela might at times confuse her own perspective with that of her mother.

The children of P3, Robin and Manuela, had qualitatively different relationships with their mother. In family systems perspective, except for Type B, later-born children are unlikely to use the same strategy as the first-born child. In particular, in families at risk, the children have to find strategies that function most protectively in the context of their family system (Pocock, 2010). Robin was compelled by his mother's consistent rejection to separate early and manage his own affective self-regulation, gradually developing a compulsively caregiving and an evolving self-reliant strategy with P3, who took pride in her competent son. Manuela was apparently kept in a closer relationship, in which P3 at least from time to time showed some interest in Manuela's intentional world and could keep her daughter in her mind for a moment, paralleled by confusing herself with Manuela, when stressed. However, also Manuela could occasionally drop from her mother's mind, maybe because of P3's trauma-related attentional lapses. This may have contributed to Manuela's traumatically skewed inter-subjectivity with her mother. In these situations, Manuela was compelled to use compulsive and, in particular, bits of obsessive strategies to engage her mother in which she succeeded.

P5 and her daughter Augusta

P5, Augusta's mother used a triangulated punitive-seductive strategy (C5-6), modified by many unresolved traumas. Deep-seated feelings of worthlessness, connected to parental emotional and physical abuse, lurked behind her façade of restless talkativeness. Her greatest fears were connected to being confronted once again with the abusive, unfair and mortifying treatment that she had experienced with her childhood parents. She was still very angry, accusing, in particular, her father to single out her as the 'black sheep' and to prefer her brother.

In the Infant CARE-Index, P5 was predominantly controlling and her sensitivity was on the border to inept. P5 instructed her daughter like a teacher, but was not affectively engaged and looked slightly bored. The rhythm was hectic. P5 initiated activities and Augusta vigilantly followed. P5 was aversive to her daughter's physical touch, maybe also reflecting her preoccupied trauma of childhood sexual harassment by a relative as told in the AAI.

In the SSP, Augusta displayed evolving compulsive caregiving (pA3) and performance (pA4-) strategies and she kept the interaction going. Augusta was a competent, verbally talented child repeating words she heard and she tried to understand what her mother and the Stranger were speaking. Augusta first cried, when she was left alone, but then she tried in a focused and skillful way to open the door. When she did not succeed, she was able to soothe herself by putting her

finger in her mouth. Neither did she display any negative affect towards her mother, nor try to share feelings with her mother at the second reunion.

4.2.3 The high-risk group

Two mothers, P1 and P6, displayed sensitivity and utilized self-protective strategies in the high-risk range, for one of the mothers, broken by the modifier disorientation (DO) and for both interrupted by unresolved traumas. The children had not been able to develop fully functional self-protective strategies. The complexity of the self-protective strategies of the children reflected that of their mothers (see Table 3). The mothers' distortion of information appeared at the procedural level as both a marked non-contingent responsivity and a conspicuous lack of affective attunement (Lyons-Ruth, 1999). The assessments are presented in an elaborated form, because of the great complexity of the interaction and the self-protective strategies.

Table 3. The sample characteristics (the high-risk group)

Parent Gender	**AAI Classification**	**Child Gender**	**CARE-Index Age (child) Sensitivity**	**PAA Age (child) Classification**
P1 F	DO A3 C3 Utr(p,ds)PA,EA Utr(dn)EN Utr(p)DV	Henry M	17 months 21 months 40 months sensitivity: 2	 21 months 40 months A+[INA]
P6 F	A7 Utr(dn)EN Utr(dn) paternal anger Utr(dn)taken into custody	Ewa F	32 months sensitivity: 2	32 months C3-4 →A3(pA6)

Note. DO A3 C3=blended compulsive caregiving and coercive aggressiveness, modified by disorientation; Utr(p,ds)PA,EA=preoccupied and dismissed trauma of physical and emotional abuse; Utr(dn)EN=denied trauma of emotional neglect; Utr(p)DV=preoccupied trauma of domestic violence; A7=delusional idealization; Utr(dn)paternal anger=denied trauma of paternal anger; Utr(dn)taken into custody=denied trauma of being taken into custody; A+[INA]=pervasive A+ structure with intrusions of anger; C3-4→A3(pA6)= changing from aggressive and feigned helpless toward compulsive caregiving and partial pre-compulsive self-reliance.

P1 and her son Henry

P1 showed disoriented blended compulsive caregiving (A3) and aggressive (C3) strategies, whereas her son displayed a generalized compulsive A+ strategy with intrusions of negative affect. In CARE-Index terms, P1 was classified as Unresponsive a (cheerfully chattering and acting without any initiation by her child) (Crittenden, 2010) and her sensitivity was in the high-risk range. She talked and did a lot, but her doings were not connected to the signals of Henry. The aim of her speech was not only to act according to an internal script of a good mother, but also to act out her own free-floating intense anxiety that she could not contain (Ikonen & Rechardt, 1980). The semantics, i.e. the meanings of the words she spoke, did not matter and she was not able to reflect on what she said. P1 could not stop chattering independent of if Henry smiled, whimpered or tried to handle toys. Henry was confused, and it was difficult for him to follow his mother. Henry tried compulsively to follow his mother, but he was not able to contain his own high anxiety with the help of it. His anger leaked out in growling sounds and restless movements. He was not able to verbalize his feelings to his mother or to regulate his arousal with the help of language. He was silent and delayed in his speech development. As P1`s unpredictable and elusive behavior was not contingent on Henry's behavior, she was a blurry target for her son and Henry was confused.

Why had P1 and her son Henry not been able to develop organized self-protective strategies? Indications of several traumas were found in the P1's DMM AAI. She portrayed a highly triangulated family with two schismatic parents, most of the time fighting and derogating each other, and herself balancing between them as the care-giving go-between. Both parents, her temperamental mother and alcohol abusing father, physically and emotionally abused their children, the full impact of which she denied. For P1, the result was disorientation and high arousal.

Trauma is the absence of mentalization of emotionally painful experiences of helplessness, intense fear and anger (Ensink, Berthelot, Bernazzani, Normandin, & Fonagy, 2014). For this reason, trauma is experienced mainly on the level of procedural and imaged memory in connection with high arousal that can be coped with even by dissociation (Crittenden & Landini, 2011). P1 told in the interview that she was amazingly patient with her son, because when Henry as a baby was crying in her arms; she did not feel anything. He could go on crying for a long time, but she was patient. Thus, P1 was not able to interpret and give meaning to Henry`s crying in order to console him. Instead she described herself of being in a nearly affectively dissociated state.

P1 had not learnt in her early attachment relationships to articulate and make sense of her negative affect, which left her psychic stage free for free-floating anxiety, that she most of the time acted out. In terms of Crittenden's (2016a, 270) gradient of interventions, P1 would need individual psychotherapy, a relationship with a sensitive psychotherapist that would help her to understand the traumas that

triggered her anxiety, to articulate and verbalize negative affect and recognize discrepancies. If she would understand her motives better through the experience of being understood empathically, she could recognize the needs of her child and would be able to respond to him more sensitively. Because Henry was not able to predict his mother or satisfy her with any behavior, he could fall prey for feelings of futility and feel himself as an object of outer forces. His current compulsive A+ strategy was not fully operational, one outcome of which were the intrusions of anger in both low-stress and moderate stress conditions.

P6 and her daughter Ewa

P6, Ewa`s mother had an extreme A7 strategy. She had learned strongly to inhibit affect because of the lack of early affective attunement and comfort, and because of her fear of her father's anger, both toward her and her mother in the discordant spousal relationship. In the AAI, she claimed she was to blame for problems in her parents' relationship. Because of the strong denial of her desire for comfort, her fear, and, in particular, her anger, she had great problems in accessing negative affect. She acted out her own feelings of being bad and deviant in her adolescent years through risk-taking oppositional behavior regarding school and escalating drug abuse. For this reason, she was taken into custody for some years.

Ewa was un-kept in comparison to her very well-kept, fit and trimmed mother. When they came to the Toddler CARE-Index and the PAA, Ewa had no mittens, nor a hat, even though the weather was cold and snow was falling. Ewa's mother explained that Ewa had refused. This could be interpreted as physical neglect. The mother was not engaged in the physical protection of her child.

In the CARE-Index terms, P6 was classified as mostly Unresponsive b (blatant form of unresponsive). At the same time she tried to look and to speak like a 'good' mother, but with an odd metallic-monotonous voice accompanied by a slight false positive affect, resulting in some Unresponsive a points (e.g., the adult chatters in a strained, but happy manner, but fails to listen to or respond to the child, the adult appears pleasantly unconnected to the child in affect, neither mirroring the child`s positive affect, nor comforting the child`s distress) (Crittenden, 2005). In Toddler CARE-Index, P6 sat at a distance, hands between her legs. Ewa was on the floor, aroused, wiggly, talking with a cheerful voice, playful, seemingly self-reliant, as if not needing anybody to play with her. However, Ewa retreated obliquely to her mother, awkwardly squirmed in her mother's lap. P6 made no anticipatory moves and did not fully accept Ewa's body in her lap, displaying a slight grimace. The child sat mostly with the back to her mother, no face-to-face contact was possible. P6's hands were pinned under her legs resulting in awkward holding of Ewa. When P6 took away the toy camera during the frustration task, Ewa fought to keep it, then gave up and showed a pouty face that her mother could not see. When Ewa got the camera back, she was not

satisfied. She clapped the roof of the doll-house, hit her mother's knee in an ambiguous way, as if both accidentally and on purpose. P6 moved out of range with an affectless face and hands kept tucked away. Ewa hit her mother in the same way as she entered her lap, as if not intentional. There was a great lack of affective reciprocity. P6 tried to present an elegant, but artificial façade. However, the coders were able to feel the 'emptiness' in the total lack of affective attunement to her daughter. Ewa tried both to act in a self-reliant way and to elicit the attention from her distant, still and physically aversive mother, by using both feigned helpless and threatening behaviors. Ewa was in the lead, the mother responding as minimally as possible. She did not respond to Ewa, even when her daughter lightly hit her. She only moved further away.

P6's delusional idealization strategy (A7) was paralleled by her daughter's complex reorganization from C+ towards A+. During the Episode 2 in the PAA, Ewa at first tried to be self-reliant playing on her own talking to herself with a bright voice, at the same time looking with a promiscuous and seductive smile to the camera, as if she tried to attract the attention of strangers. She tried to use both feigned helpless and some coercive actions, but she was not able to involve her mother even in a struggle. In fact, in the PAA she used anything to involve her mother, and there were only short moments of doing nothing, when Ewa was at a loss what to do, how to involve her mother next. In the beginning of the Episode 5, Ewa claimed that she had to visit the toilet. When her mother tried to delay it, Ewa said that she would pee in her pants. The mother asked out in the air "What shall we do now?" and they were permitted to visit the toilet. (Before the PAA Ewa had been asked, if she would like to visit the toilet, and she had refused). After their return, Episode 5 was started anew and the PAA proceeded in accordance with the guidelines. The urgent demand for a toilet visit was probably an indication of both Ewa's high anxiety intruding and coercive strategy. Ewa tried to initiate a struggle in the last episode. She asked her mother to get toys and do things that were not accessible in the room. The function may have been to engage her mother to solve the problem or compel her mother to leave the room. Ewa's mother was not drawn into the struggle and Ewa switched to a compulsive caregiving (A3) strategy, uttering in a bright voice: "Look, there are the ponies", and they started, in the lead of Ewa, to look at the ponies. Ewa captured the attention of her mother again for a short moment.

The danger for Ewa was not being able to catch and maintain the attention of her minimally affectively attuned mother, who appeared almost `dead´, (for the concept, see Green, 1986, p. 142). The problem may originate from earlier failed interaction processes. In terms of Winnicott (1974), Ewa`s feeling of going-on-being may have been compromised, when she has not, as a baby, been able to reach her mother. Because of the risk of feeling non-existent, psychologically annihilated, lacking the fundamental feeling of continuity-in-being, Ewa was desperate to maintain her mother's attention, trying in several ways to elicit any

responses from her mother (Winnicott, 1974). Ewa used passive, feigned helpless strategy doing silly things deliberately that slightly amused her mother and made the mother instruct her. In addition, Ewa showed anger (face, position) using a threatening strategy, but it did not create a struggle. Ewa's mother could not be engaged in struggle. Even though Ewa could get her will through, she was not able to engage her mother with a coercive strategy, because of her mother's lack of engagement. Ewa also displayed some disarming behaviors (face, voice, posture), but her C+ strategy did not function, because she was not able to involve her mother. Still Ewa did not display feelings of futility indicating depression. Instead she had started to develop a compulsive caregiving (A3) strategy to catch the attention of her retreating mother, e.g., Ewa tried to to cheer up her mother by doing silly things and looking seemingly stupid. The further the mother is in retreat, the further the child has to go in approach to make the mother aware of her (Crittenden, 2016c). Thus, the C3-4 strategy did not work any longer and could not elicit responses from her mother. Ewa was developing a compulsive caregiving (A3) and evolving compulsive self-reliant (pA6) strategies in order to connect to her mother.

On the surface, Ewa's mother's greatest felt danger was that her anger would break through and she would not be able to control it, and keep up the façade of normality. In parallel with her daughter, a more-seated deep fear was the experience of her own affective emptiness. P6 might fear that she was not able to go-on-being, connected to fears of psychological annihilation (Winnicott, 1974). She had to get mirrored in the eyes of other persons in order to know, who she was and what she felt. P6's capacity to inhibit negative affect was both a strength and limitation. The strong inhibition may have helped her to go on, at least robot-like with her everyday life, especially, if her daughter kept her fully preoccupied. However, the strong denial of any negative affect may result in numbness, feelings of hollowness. Her earlier drug addiction and impulsive acting out during adolescence may have represented intrusions of negative affect and may have been attempts at avoiding the painful feelings of inner death, numbness and worthlessness. The treatments so far appeared to have had iatrogenic effects (for the concept, see Crittenden, 2016a, 276), as these had aimed at increasing her already excessive self-control.

If the situation continues like this, it will be difficult for Ewa to develop self-determination and she will gradually proceed from the C+ strategy in direction of A+ including risks of loneliness and victimization. However, P6 showed an opening to reflective functioning in the AAI, when she, responding to the last question, tried to analyze the press on normality in her family of origin. Her mother, Ewa's grandmother, liked to keep the family façade polished and shining. P6 was considered a shame for the family. However, P6 stated that she herself abhorred polishing family facades, and she stressed that one should not feel ashamed, if one does not succeed in the way expected. Instead one should talk

about it. Even though P6 criticized values of her family in the AAI only on the level of semantic generalizations, this indicated that she had started to understand that everything was not that perfect as it appeared to be and that she was not that bad that she appeared to be in her family of origin. This insight would be a start for a therapeutic dialogue.

In order to avoid the risk of new intrusions of negative affect and a relapse into drug addiction, P6 would need individual psychotherapy in which she could access her negative affect, in particular, her anger without fearing a breakdown. In terms of Ogden (2014), she would need help with learning to feel continuity-in-being with a psychotherapist who could contain her early annihilation anxieties. Any intervention must help her to feel more alive by gradually accessing and connecting to her negative affect, to help her to contain and verbalize it (Ogden, 2014) and strengthen her core identity. Gradually, she also would need help in processing the negative feelings connected to her scape goat position in her triangulated family of origin, a position that she still has. She had, in fact, accepted her role as the deviant, less worthy child and felt bad about herself in comparison to her idealized parents and her more successful siblings. This would also help her to become more self-determined, independent and critical in regard to her own, highly idealized parents and to change her distanced and unresponsive relationship with her daughter Ewa. She could become more protectively available to Ewa and establish a more assertive authority relationship to her daughter. Ewa could gradually learn to cope with her mother with self-protective strategies in the normative ABC range, characterized by less distortions of information (see Farnfield et al., 2010: Dynamic-Maturational Model of self-protective strategies in adulthood).

4.3 Conclusions

In Studies II and III, a variety of the self-protective strategies of parents with ADHD was found. Also the children of these parents utilized a variety of self-protective strategies, the children's strategies matching those of their parents in regard to the degree of transformation of information. This match was mediated by the level of parental sensitivity. The more self-protective and complex the parents' strategies were, the less sensitive was their dyadic interaction with their children, which made it difficult for the children to make sense of their parents' behavior. In particular, Study III demonstrated the unique ways of the transmission of attachment in a sample of parents with the ADHD diagnosis, for which a simple match or reversal patterning across generations was less probable than in a normative, that is an average sample (Hautamäki, Hautamäki, Neuvonen, & Maliniemi-Piispanen, 2010; Verhage et al., 2016). Instead the children's strategies matched those of their parents in regard to complexity, that is, the degree

of distortion of attachment-relevant information. The result is in line with Landini's, Crittenden's and Landi's (2016) findings concerning the parents of child psychiatric patients. Also the parents of child psychiatric patients displayed more extreme self-protective strategies which were punctuated by traumas and losses, and frequently modified by depression.

In the low risk group, the partially reorganizing parents were able to verbalize dangerous and traumatic experiences in their triangulated families of origin, both being drawn into schismatic spousal relationships connected to their parents slandering each other, for one of them accompanied by domestic violence. As parents, they had been able to change some of the dysfunctions in their family of origin, that is, to create a family situation in which their children did not witness domestic discord or were drawn into triangulated family relationships. In contrast to reversal parenting (Crittenden & Landini, 2011; Hautamäki et al., 2010), they appeared to be able, not only semantically, but also on the level of procedural and sensory memories (Crittenden & Landini, 2011), to protect their children, and create an adequately sensitive relationship to them for the self-protective strategy (C1-2) in the normative range to evolve. Traumas in regard to dismissed early emotional neglect and preoccupied emotional abuse, might, however, still interrupt their behavior in inexplicable ways.

In the moderate risk group, the parents' need for self-protection compromised their ability to protect and comfort their children. They had more complex self-protective strategies and also unresolved traumas could still interrupt their behavior in inexplicable ways. However, the children in the moderate risk group had been able to adapt to their parents' caregiving behavior by developing complex, but still fully operational self-protective strategies.

In the high-risk group, the parents felt compelled to protect themselves more than their children, i.e., their relationship to their children lacked in predictable protection, comfort and clarity of communication. The children had developed complex, not even fully operational self-protective strategies in line with the results of Landini et al. (2016). Because of their mothers' minimal contingent responsivity and affective attunement, the children did not feel themselves recognized, that is "sensed" and "known", in particular, when they were distressed. According to Beebe and Steele (2013, p. 598), "These profound experiences of non-recognition may disturb the infant's core sense of safety." In the high-risk group, the internal dangers felt by the two children might even be connected to falling apart, psychological annihilation, not being able to go on being in terms of Winnicott (1974). This elicits an intense anxiety that is immediately acted out in general gross-motor activity. The breakdown in continuity of being results in a defense organization with the function to cope with the primitive agony of falling apart and the fear of psychological annihilation (Ogden, 2014). Winnicott (1965) suggests that the resulting pattern of

fragmentation of being may be found in the psychological etiology of restlessness, hyperkinesis, and inattentiveness.

5 Discussion

5.1 Discussion of findings and implications for treatment

The aim of this thesis was to specify the unique way in which a general explanation fits a singular case or multiple cases, based on commonality and differences, across manifestations (Yin, 2003). The focus was also to understand the meaning of the circumstances within cases (see Eisenhardt, 1989). The present thesis showed a great variation of the self-protective strategies of adults, who had received the same ADHD diagnosis. Every case was unique in regard to the self-protective strategies displayed. In addition, the variety of the complexity of the self-protective strategies of the parents was connected to the variation of risk in the dyadic interaction between the parents and their children. The children's self-protective strategies matched those of their parents in regard to the complexity connected to the degree of transformation of information. Three subgroups were formed on the basis of risk as indicated by Crittenden's (2016a) gradient of transformation of information. The more complex the parent's self-protective strategy was, the less sensitive was the interaction, that is, some parents' need for self-protection compromised their ability to protect their child and decreased their sensitivity to their child. Thus, this thesis using the more subtle DMM assessment methods indicated the necessity of further research regarding the intra-group variety of the protective strategies as well as the sensitivity of parents with the exclusive ADHD diagnosis.

In addition, all adult respondents displayed indications of unresolved traumas in their AAI discourse that momentarily could interrupt their strategic functioning in inexplicable ways, decrease their sensitivity to their children and their ability to engage in regulation of emotion with them as assessed by the CARE-Index. Many of the traumas were connected to a triangulated family system in the parents' family of origin. Currently, as these adult respondents were parents, there was a potential conflict of interest between the parent and the child, the parent using a self-protective rather than a child-protective strategy (Landini et al., 2016). It is difficult for a child to cope with a highly unpredictable and aroused parent, who is responding to past unresolved trauma in the present, who changes strategies frequently and who may be confused in regard to her own perspective. The findings support the hypothesis of Crittenden et al. (2014) that characteristics of social functioning connected to ADHD could be conceptualized as an adaptation to a triangulated family system characterized by the lack of clarity of communication. Ringer and Crittenden (2007) and Dallos and Smart (2010) stress the disrupting effects of the parents' unresolved traumas on their children, if their unresolved experiences of danger and distress are triggered in interaction with their children. As Svanberg, Mennet and Spieker (2010, p. 375) point out, " in

view of the notion that early relationships have an impact not only on how infants construct their minds, but also how they build their brains, interventions that alleviate early risk are useful". This indicated the importance of also working with parental traumas.

For the adult respondents of this thesis, the diagnosis of ADHD did not give differentiated guidelines for adequate intervention. All adult respondents had got medication and some of them had received outpatient counselling, but none had received individual psychotherapy. Though they displayed within-diagnosis heterogeneity, all of them had received the same medical treatment. The parents differed in regard to their self-protective strategies in regard to Crittenden's (2016a) gradient of transformation of information, which was linked to varying sensitivity and child strategies. Thus, planning the unique treatment for each family would benefit from recognizing the self-protective strategies of these parents with ADHD and their children, the traumas of the parents as well as the modifiers, in particular, disorientation (see Crittenden et al., 2014; Landini, 2014; see also Kozlowska & Williams, 2009).

The DMM assessment methods offer new opportunities for intervention planning, how to respond to family distress to protect endangered children (see Spieker & Crittenden, 2018). All of these families would benefit from an attachment-oriented family psychological assessment, assessments of the self-protective strategies of both the parents and children making possible a treatment tailored to the unique family needs (Crittenden et al., 2014). All these parents would benefit from individual psychotherapy, in which they would get the emotional support to learn to identify dangers, articulate their feelings and encourage open communication of their relationships with other family members in their family of origin, in particular, exploring triangular processes and the part they themselves played in the family system. In particular, mothers of the moderate and high-risk groups would need a more intense intervention (see levels of intervention, Svanberg et al., 2010). Only the partially reorganizing parents would benefit from video-feedback (see Crittenden, 2016a). In addition, they would also be helped by an individual psychotherapy supporting their attachment reorganization in the zone of their potential development.

The lack of internal mental state language showed the need for mentalization based treatments (Fonagy & Bateman, 2006), in which the client is recognized as an intentional agent and a virtuous cycle may be established characterized by growing epistemic trust and the re-generation of the patient's own capacity to mentalize (Fonagy et al., 2015). In addition, Schore (2001, 2003) analyzes how relational traumas in attachment transactions that are imprinted into procedural memory may contribute in the development of the psychiatric disorders, including deficits in attention. He makes the distinction between the single episode, acute stress and cumulative, chronic stress in infants in interaction with their parents (Schore, 2003). He states that his regulation theory strongly supports

psychodynamic models of psychotherapy (Schore, 2014; see also Carney, 2002, Rothstein, 2002 and Zabarenko, 2002). DMM draws the same distinction regarding traumas and stresses that the child is able to organize self-defensive behavior around an ongoing and pervasive trauma (Crittenden & Landini, 2011). According to Crittenden and Landini (2011), if coping with an ongoing threat is subsumed into the self-protective strategy resulting in adaptation, it is redundant to assume an unresolved trauma. Instead, an unresolved trauma only momentarily punctuates the self-protective strategy (Crittenden & Landini, 2011).

As the parents had not worked through their traumas, psychotherapy must at start focus on the regulation of their arousal by working with unresolved traumas (Landini, 2014). Exploring the denied anger, fear and desire for comfort would gradually help them to access, to verbalize and to draw self-relevant and -protective conclusions in regard to their family of origin and their current close relationships. They could learn better to understand how their roles in triangulated family systems have impacted and still impact them. The psychological treatment would help them to make true their benevolent wishes regarding their child, at first stated only on the semantic level (see, the risk of reversal parenting, Crittenden & Landini, 2011; Hautamäki et al., 2010) instead of feeling driven by easily triggered anxiety to re-enact scenes from their own childhood of being unprotected and uncomforted.

5.2 Trustworthiness of the qualitative research methods

For the criteria of trustworthiness of the study, Lincoln and Guba (1985) offer terms `credibility´, `transferability´, `dependability´ and `confirmability´ that have a better fit with naturalistic epistemology and can be used as equivalents for the conventional formulations `internal validity´, `external validity´, "reliability´ and `objectivity´. In this thesis, these alternative terms are employed to ensure and to assess the quality and trustworthiness of the research process.

Lincoln and Guba (1985) outline several strategies for increasing the credibility of qualitative research. In regard to this research process, the main activities for increasing the likelihood of credible findings were triangulation of different methods, researchers and data, and peer debriefing. Triangulation was also utilized in order to ensure dependability, which refers to methods employed and other researchers` possibility to replicate procedures using the same methods. For this reason, all the steps made during the research process were explained in order to ensure the possibility for the reader to follow how the research was conducted. The richness of this research is that the cases were analyzed as dyads using more than one valid assessment. The self-protective strategies of adults and children were assessed using the AAI, the SSP and the PAA, and the parents' and children's interactive behaviors were assessed as dyadic using the CARE-Index. All this information was utilized in order to formulate rich case descriptions. All

the assessments were coded by two coders and always at least one of the coders had research-level reliability. Also Dr. Patricia Crittenden classified one PAA and four of the CARE-Index interactions. During all the assessments and coding process the instructions of the assessment protocol were strictly followed. The interviewer was trained for conducting the AAI interviews. Two of the coders, professor emerita Airi Hautamäki and associate professor Natalia Pleshkova participated in international coding networks during the study. Airi Hautamäki acted as a facilitator and co-trainer with Dr. Patricia Crittenden on her SSP and AAI courses during these years. In parallel, both Airi Hautamäki and Natalia Pleshkova coded international exemplars, which have been included in the Infant and Toddler CARE-Index and the SSP and PAA coding manuals. In addition, they both took regularly part in the international Trainers' meetings. Thus, the ongoing contact with the international coding networks prevented potential coder drift. Also the classifications made by Dr. Patricia Crittenden agreed with the classifications given by the coders. In addition, in order to prevent coder drift, the coding was not done in a cohesive group. There was enough heterogeneity. One of the coders, Natalia Pleshkova, was from another university, the St. Petersburg State University, and from another country, Russian Federation. Natalia Pleshkova acted as a blind coder, that is, naive to all external information regarding the identity of the dyads that could influence the coding.

Peer debriefing refers to regular meetings with other people who are not involved in the research in order to reveal one`s own biases and to discuss working hypotheses (Lincoln & Cuba, 1985). During the research process, repeated peer debriefing occurred with colleagues during research seminars and international conferences. In addition, all the articles went through many peer-review processes and the constructive feedback given by reviewers from international peer-reviewed journals increased the likelihood of credible findings.

Lincoln and Guba (1985) use the concept transferability rather than generalizability, and they argue that researchers can only set out working hypotheses together with a description of the time and context in which the findings took place. For judgements about transferability of conclusions from one case to another, researchers must provide thick descriptions of the cases they study. According to Lincoln and Guba (1985), thick description should include essential judgmental information about the studied context that a reader may need to know in order to understand the findings. In this thesis, which was based on three peer-reviewed internationally published articles, the goal was to provide sufficient information, from the beginning until the end of the whole process, in regard to the participant recruiting process, the assessments, the coding process, reporting the findings and formulating conclusions in order to ensure thick descriptions of the cases.

Lincoln and Guba (1985) suggest that confirmability is a concept that parallels conventional term objectivity. It refers to the situation when multiple observers

reach a collective judgement on a phenomenon. In this thesis, valid assessments were employed and the data was coded by at least two trained coders. Additionally, several regular meetings were utilized where the research team members were able to discuss and analyze the coding reports in order to formulate conclusions.

Lincoln and Guba (1985) present a reflexive journal as a technique that applies to the establishment of credibility, transferability, dependability and confirmability. A reflexive journal is a diary where the researcher records a variety of information about the daily schedule, logistics of the study and methodological decisions made. During the research process, a reflexive diary was maintained in order to collect and store information about meetings with the participants and discussions with peers and the research team members.

5.3 Limitations and recommendations for further research

This thesis consists of three small-scale exploratory multiple-case studies that at best can demonstrate new ideas to be tested with quantitative methods in larger samples. One of the main limitations was the small sample size due to difficulty in recruiting the hard-to-reach group using specific inclusion and exclusion criteria. Probably the results would have differed, if also cases with comorbid diagnosis would have been included, e.g., the array of the self-protective strategies would even have been greater. However, the focus of the study was on those persons, who had received the exclusive ADHD diagnosis. The clients of the Clinic for Neuropsychiatry, who fulfilled the inclusion and exclusion criteria, were invited to participate in the study. However, participation in the study was voluntary. For this reason, self-selection may have occurred in initial participation. Yet, none of the participants withdrew from the study although some of them had difficulties remembering scheduled appointments and were hard to reach. Because of the small sample size, the thesis is more exploratory than confirmatory. In addition, the data was collected using time-consuming, in-depth attachment assessments requiring extensive training. Still, the size and the quality of the data were good enough for the exploratory purpose of this thesis.

In the present thesis, Study III offered a heuristic hypothesis about how self-protective strategies were transmitted, as mediated by parental sensitivity, in a sample of parents with ADHD to their children. The children's protective strategies matched those of their parents in regard to the degree of distortion of information. The more self-protective and complex the parents' strategies were the less sensitive was their dyadic interaction with their children. Sensitivity was assessed in a separate assessment from child attachment strategy. However, the mediation was not analyzed using quantitative methods and for this reason the conclusions are tentative. The children's strategies matched those of their parents in regard to complexity, that is, the degree of distortion of information. In contrast

to the AAI, the CARE-Index, the SSP and the PAA do not assess traumas. Thus, the impact of the parents' traumas and losses on their children could not be directly assessed, only inferred indirectly from observed interaction, in particular, in terms of traumatically skewed inter-subjectivity (Schechter, 2017) that may, however, originate both from the parents' trauma and/or self-protective strategy. The effect on the child of feeling unprotected and uncomforted depends, in turn, on the child's ability to cope with his self-protective strategy with his heightened arousal. If the stressor exceeds his coping capacity, trauma ensues.

In addition, Study I, as a retrospective multiple-case study, cannot establish causal relations, but heuristic hypotheses may be drawn about the perceived dangers in the family relationships that constitute a risk for developing ADHD symptoms. Longitudinal studies, including structural equation modelling, are needed in exploring the causal relations. However, in terms of the current transactional thinking about family dyads and circular thinking about family triads, the search for linear causal relations appears futile. At best, the study can highlight the multifaceted functions of ADHD symptoms in the dyadic-transactional and triadic-circular family relationships of triangulated family interactions, which, in turn, further impair the development of the self-regulatory capacities of the child. Prospective longitudinal studies are needed to separate the effects of these factors on the development of attachment and the symptoms of ADHD. However, treatment studies focusing on the family system and using the DMM methods (Crittenden et al., 2014; Dallos et al., 2012) may deepen the knowledge of the functions of the ADHD symptoms in family interaction, as well as the processes of transmission, how troubled parents, in spite of opposite, well-meaning intentions, may reproduce adverse family functioning enhancing easily distractible and distracting behavior in their children.

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